provided by National Documentation Centre on Drug Use



# management of cannabis use disorder and related issues

a clinician's guide

# management of cannabis use disorder and related issues

### a clinician's guide

Funded by the Australian Government Department of Health and Ageing

The opinions expressed in this document are those of the authors and are not necessarily those of the Australian Government.

© National Cannabis Prevention and Information Centre, University of New South Wales, Sydney, 2009

This work is copyright. You may download, display, print and reproduce this material in unaltered form only (retaining this notice) for your personal, non-commercial use or use within your organisation. All other rights are reserved. Requests and enquiries concerning reproduction and rights should be addressed to The Director, National Cannabis Prevention and Information Centre, University of New South Wales, Sydney NSW 2052, Australia.

#### Legal disclaimer

This document is a general guide to appropriate practice, only to be followed subject to the practitioner's judgment in each individual case. The Guidelines are designed to assist decision-making and are based on the best information available at the date of publication. In recognition of the pace of advances in the field, it is recommended that these guidelines be reviewed and updated every few years.

ISBN: 9780733428074

### contents

Introd	uction1	5.1	Cannabis withdrawal24
Chapte	er 1: Background information 2	5.2	Assistance through withdrawal24
1.1	Cannabis prevalence2	5.3	Other influences on withdrawal24
1.2	Dosage	5.4	Assessment of withdrawal symptoms 24
1.3	Potency3	5.5	What is the most appropriate setting
1.4	Demand for treatment3		for withdrawal?24
1.5	Cannabis-related problems 4	5.6	Withdrawal from multiple drug use24
1.6	Cannabis intoxication, abuse,	5.7	Pharmacotherapy for cannabis withdrawal
	and dependence 5	5.8	Gradual vs sudden cessation25
1.7	Risk of dependence6	5.9	Symptom-focused approach to withdrawal 25
1.8	Cannabis-withdrawal syndrome	5.10	Stepped-care for withdrawal symptoms 26
1.9	Cannabis treatments	5.11	Psycho-education for withdrawal
1.10	Policy response to cannabis harms8	2.11	symptoms26
1.11	International approaches to	5.12	Summary27
	criminal sanctions8	5.13	References
1.12	References	-	er 6: Brief interventions
Chapte	er 2: Working with cannabis users 10	6.1	Overview of brief interventions27
2.1	General principles of working with	6.2	Successful elements of brief
	cannabis users10	0.2	interventions29
2.2	Intensity of treatment11	6.3	Motivational interviewing (MI)29
2.3	General principles of cannabis	6.4	Cognitive-behavioural therapy (CBT)31
	interventions	6.5	Contingency management (CM)31
2.4	Setting	6.6	Outline of a single-session intervention 33
2.5	Further reading12	6.7	Two to six-session interventions34
2.6	Reference	6.8	Setting a quit day35
Chapte	er 3: Screening for cannabis use12	6.9	Summary35
3.1	What is screening?12	6.10	References
3.2	Rationale12	Chante	er 7: Special considerations37
3.3	Who to conduct screening for	7.1	Young people
	cannabis and when13	7.2	Gender
3.4	How to introduce screening to the client 13	7.2 7.3	Culturally and linguistically diverse
3.5	Types of screening13	7.5	populations
3.6	Standardised screening tools 13	7.4	Indigenous populations
3.7	Biochemical markers for screening	7.5	Clients who are diverted to treatment
- 0	and assessment14		or are otherwise involuntary40
3.8	Summary	7.6	Reducing use in those not seeking
3.9	References		treatment40
Chapte	er 4: Assessment	7.7	Individual vs group treatment40
4.1	Overview16	7.8	Treatment settings41
4.2	Rationale17	7.9	Early termination of treatment41
4.3	Assessment as an engagement strategy 17	7.10	Continuing care
4.4	Comprehensive drug use assessment	7.11	Other therapies42
	(60–120 mins)	7.12	Internet approaches42
4.5	Domains of assessment18	7.13	Concurrent drug use
4.6	Adjunctive measures21	7.14	Dealing with time constraints44
4.7	Continuing assessment22	7.15	Summary45
4.8	Post-assessment feedback22	7.16	References
4.9	Summary22	Chapte	er 8: Family interventions47
4.10	References22	8.1	Families47
Chapte	er 5: Withdrawal management24	8.2	Principles of family-inclusive practice 47

8.3	Confidentiality47	Alcohol, Smoking and Substance Involvement
8.4	"Level of engagement"48	Screening Test (ASSIST) – information sheet75
8.5	Summary50	Cannabis Problems Questionnaire – information sheet76
8.6	References	
Chapte	er 9: Psycho-education and social support 50	Cannabis Problems Questionnaire77 Cannabis Withdrawal Checklist
9.1	Overview of psycho-education50	– information sheet80
9.2	Purposes of psycho-education 51	Cannabis Withdrawal Checklist80
9.3	Stage-dependent psycho-education 51	Cannabis Use Problems Identification
9.4	Resource guide52	Test (CUPIT) – information sheet81
9.5	Self-managed change53	Cannabis Use Problems Identification
9.6	Social-support or mutual-aid groups 54	Test (CUPIT)82
9.7	Summary54	Readiness to Change Questionnaire (RTCQ)
9.8	References	- information sheet
		Readiness to Change Questionnaire
	er 10: Treating mental health in	– cannabis revision
	ois users	Scoring the Readiness to Change
10.1	Considerations55	Questionnaire86
10.2	Mental health problems associated with cannabis55	Modified Mini Screen (MMS)
40.04		– information sheet87
	Cannabis, psychosis, and schizophrenia55	Modified Mini Screen (MMS)88
	Cannabis and depression56	Chapter 12: Worksheets90
_	Cannabis and anxiety56	Seemingly irrelevant decisions91
10.2.4	Long-term cannabis dependence; depression and anxiety56	Cravings92
10.2.5	Cannabis and suicide	Coping with cravings93
	Other mental health issues56	Urge surfing94
10.3	Screening for cannabis use in a	Decisional balance sheet95
10.5	mental health setting56	Cannabis ladder96
10.4	Assessment and treatment of	Cannabis-use diary97
·	cannabis use in a mental health setting 57	Personalised feedback summary98
10.5	Mental health symptoms in alcohol	Relaxation training – for clinicians99
	and drug settings61	Worksheet – tips for better sleep100
	Screening         61           Assessment         62	Relaxing your muscles101
	Treatment62	Cannabis withdrawal syndrome
10.6	Summary62	- client information102
10.7	References	Problem-solving skills – for clinicians104
,		Problem-solving worksheet – client worksheet 105
	er 11: Screening tools	Relapse prevention – for clinicians
	ty of Dependence Scale (SDS) mation sheet65	Cannabis-use risk hierarchy107
	ty of Dependence Scale (SDS)	Principles of cannabis refusal skills108
		The "psychological squirm" worksheet
	r 10 (K10) – information sheet	– clinician
	r 10 (K10)	Pleasant activities
	odified Simple Screening nent for Substance Abuse	Managing negative moods and depression 111
(MSSI-	SA) – information sheet69	Assess importance of making a change in cannabis use – clinicians
	ed Simple Screening Instrument for Substance	Assess confidence of making a
	(MSSI-SA) self-administered form	change in cannabis use – clinicians
	osis Screener – information sheet71	References113
-	osis Screener	Appendices
wienta	l Health Screening Form mation sheet72	Appendix 1: Levels of evidence
	Health Screening Form iii73	Appendix 2: Authors of background papers 115
IVIL III		ADDENDIA Z. MULIOLI DI DUCKZIONIU DADELI

#### about the authors:

#### Jan Copeland BSc (Psych) (Hons), PhD, MAPS

Jan Copeland is Professor of Drug and Alcohol Studies and Director of Australia's National Cannabis Prevention and Information Centre (NCPIC). She is also an Assistant Director of the National Drug and Alcohol Research Centre (NDARC). NCPIC is a consortium led by NDARC with six key partners, nationally managing a large and diverse set of programs. Over the course of her career, Professor Copeland has developed three major programs of research: in brief interventions for cannabis-use disorder; development of treatment outcome monitoring systems; and psychostimulants. She has published widely on aspects of brief interventions for cannabis-use disorder. She works with a number of community-based agencies on service evaluations and executive management.

#### Amie Frewen DPsych (Clinical), BA (Psych), BPsych

Amie Frewen is a Senior Research Officer with the National Cannabis Prevention and Information Centre (NCPIC) in Sydney. Amie has a background in clinical psychology and has worked as a clinician and researcher. Amie's doctoral research was on cannabis withdrawal and treatment using a pharmacological agent.

#### Kathryn Elkins BA (Psych) Hons

Kathryn Elkins is a Research Fellow with a background in clinical psychology. She has worked at Orygen Youth Services in Melbourne for over 14 years on clinical trials on comorbidity of substances and mental illness, as researcher and therapist. She has co-authored papers and a treatment manual on cannabis use in psychosis, as well as many other publications on comorbidity. Kathryn's doctoral research is on tobacco use in the population experiencing first episode of psychosis.

### acknowledgements:

The following workshop participants guided the content of these guidelines:

Participant	Position	Agency
Prof Alan Budney	Professor and Senior Research Scientist	University of Arkansas, U.S.
Allan Colthart	Clinical Coordinator Clinical Psychologist	Drug and Alcohol Youth Service (DAYS)
Prof Amanda Baker	Deputy Director/Clinical Psychologist	University of Newcastle
Dr Amie Frewen	Senior Research Officer	National Cannabis Prevention and Information Centre
Prof Dennis Gray	Deputy Director	National Drug Research Institute
Etty Matalon	Training Manager	National Cannabis Prevention and Information Centre
Dr Greg Martin	Manager of Interventions Development	National Cannabis Prevention and Information Centre
James Pitts	CEO	Odyssey House
Dr Jan Bashford	Clinical Researcher	Massey University, New Zealand
Prof Jan Copeland	Director	National Cannabis Prevention and Information Centre
A/Prof Jason Connor	Director, Centre for Youth Substance Abuse Research	The University of Queensland
Dr Julia Tresidder	Research Analyst	Australian Institute of Criminology
Kathryn Elkins	Research Fellow/Psychologist	ORYGEN Youth Health
Kerri Lawrence	Manager	Manly Drug Education and Counselling Centre
Dr Leanne Hides	Clinical Research Coordinator/Research Fellow	ORYGEN Youth Services
Dr Mark Montebello	Senior Staff Specialist	The Langton Centre
Scekar Valadian	Senior Project Officer	Aboriginal Programs Unit Drug and Alcohol Services South Australia
Prof Simon Lenton	Deputy Director/Clinical Psychologist	National Drug Research Institute
Steven Childs	Manager Psychological Services	Northern Sydney/Central Coast Drug and Alcohol Service
Tess Finch	Manager	Sutherland Cannabis Clinic
Dr Wendy Swift	Senior Lecturer	National Drug and Alcohol Research Centre
FACILITATOR A/Prof Alison Ritter	Director	Drug Policy Modelling Program

Special thanks to the following people for additional expertise included in the guidelines: Dr Kyle Dyer, for his assistance on biological markers; Dr Julia Butt, for assistance with CALD and Indigenous populations; and Dr Melissa Norberg, for her thorough and skilled editorial assistance. The authors also wish to thank the clinicians in the field for feedback on the penultimate version. Professional editing was completed by Mr Paul Dillon, Ms Clare Chenoweth and Mr Dion Alperstein.

#### foreword

#### Professor Jan Copeland

Director of the National Cannabis Prevention and Information Centre

The evidence base of high-quality cannabis research is building in a variety of topics, including the epidemiology of cannabis use, its relationship to psychosis and other mental health problems, and its respiratory-related harms, to name just a few. Whilst this research provides those working with cannabis users and their families with important material for psycho-education, there have been no expert, consensus-based clinical guidelines for the management of cannabis-related problems.

The present guidelines are the culmination of more than a decade of research into the screening, assessment, and management of cannabis-related problems. Although there is a growing literature on a range of motivational, cognitive-behavioural, and contingency-management interventions, there are not sufficient data to submit to a meta-analysis. These guidelines aim to provide clinicians with a reference point for the management of cannabis-related problems. Health-care practitioners may be confronted with client presentations ranging from occasional cannabis use through to dependence; the presentations may include mental health symptoms and acute behavioural disturbances, such as psychosis and aggression. This monograph is suitable for health-care practitioners who work with a variety of cannabis-using individuals. Readers will be made familiar with the various aspects of interventions, including assessment, withdrawal, and psycho-education.

I wish to thank those colleagues who have worked with me closely over the years on our cannabis intervention team, particularly Etty Matalon, Dr Greg Martin, and Dr Wendy Swift. Special thanks are owed to Dr Amie Frewen, who led this project and oversaw the work of the international experts who contributed to these guidelines.

Please visit the centre's website, at <u>www.ncpic.org.au</u>, for further postings of clinical measures and summaries of research on interventions in cannabis-use disorder as they emerge.

### glossary of terms

AOD (alcohol and other drug) workers	All those who work in alcohol- or drug-treatment settings in a clinical capacity. This includes, but is not limited to, nurses, medical practitioners, psychiatrists, psychologists, clinicians, social workers, and other workers in the sector
Bong	A water pipe used to smoke cannabis (may also be used with tobacco). The section that contains cannabis is the cone piece. Therefore the unit of measurement is referred to as a 'cone'
Brief intervention	A minimal interaction with a medical or mental health professional, ranging in duration from several minutes up to six or more sessions. This term is used primarily in the context of treatment for substance use problems
Cannabinoid	An organic chemical substance belonging to a group that comprises the active constituents of cannabis. The three main cannabinoids are: THC, CBD, and CBN
Cannabidiol (CBD)	A cannabinoid found in cannabis. It is a major constituent of the plant, representing up to 40% in its extracts. It is found in inverse ratio to THC, that is as the level of THC rises, that of CBD falls. Recent studies have suggested that CBD has antipsychotic properties
Cannabinol (CBN)	CBN (Cannabinol) is produced as THC ages and breaks down. It is thought to potentiate THC's disorienting qualities
Comorbidity	In these guidelines, refers to the concurrence of an alcohol and or other drug (AOD)-use disorder with one or more mental health conditions. Also known as co-occurring or dual diagnosis
Decriminalisation	Drug policy whereby possession of a drug for personal use is treated as a misdemeanour rather than a criminal offence but remains illegal
Hashish	A purified resin, prepared from the flowering tops of the female cannabis plant, that is smoked or chewed. It is considered to be the most potent preparation of cannabis
Joint	Herbal cannabis or resin (sometimes mixed with tobacco or other plant material) rolled into a cigarette
Mental disorder	Refers to the presence of a mental disorder (other than substance use disorders) as defined by ${\sf DSM-IV-TR}$
Psychosis	Any significant mental disorder that is characterised by a loss of contact with reality by delusions, hallucinations and/or disorder and inability to interpret information and make sense of the world
Stepped care	Use of interventions that start at the least intensive and after a period of monitoring are either "stepped up" in intensity or inversely "stepped down" after treatment gains have been made
Tetrahydrocannabinol (THC)	The cannabinoid that is responsible for the "high"

#### introduction

The Management of Cannabis Use Disorder and Related Issues – A clinician's guide, provides the knowledge essential to help people reduce, cease, or manage their cannabis-use problems. The manual aims to provide facts, figures, and useful techniques to assist clinicians in providing evidence-based treatments for cannabis users wishing to change the patterns of their use. The manual also provides a number of worksheets to use with cannabis clients.

The manual is divided into 12 sections:

Chapter 1: Background information

Chapter 2: Working with cannabis users

Chapter 3: Screening for cannabis use

Chapter 4: Assessment

Chapter 5: Withdrawal management

Chapter 6: Brief interventions Chapter 7: Special considerations Chapter 8: Family interventions

Chapter 9: Psycho-education and social support

Chapter 10: Treating mental health in cannabis users

Chapter 11: Screening tools Chapter 12: Worksheets

This manual is not intended as a substitute for obtaining training and experience in managing substance use disorders or for generalist counselling skills. It is designed to complement your existing skills and to help you offer your cannabis-using clients the greatest therapeutic benefits.

Examples of what to say to clients appear in the following format:

"Here's a suggestion you might try."

#### Who are these guidelines for?

These guidelines are for all clinicians working with young people and adults who are experiencing cannabis-related problems. Throughout these guidelines, we refer to you as "clinician" and the person seeking help as the "client". Clinicians who may find these guidelines useful include (but are not limited to) alcohol and other drug workers, nurses, mental health workers, youth workers, alcohol and other drug specialist doctors, health workers, psychologists, psychiatrists, child-protection workers, probation and parole officers, and general medical practitioners. These guidelines will be useful whether you work in a generalist health-care setting, an inpatient unit, or an outpatient setting. They may be especially useful for general medical practitioners. General practitioners are in an ideal position to

identify problematic cannabis use, given the high proportion of the population who attend primary health-care services each year.

Given the differences in workers' roles, education, training, and experience, not every reader will be able to address all issues to the same extent. Workers should use these guidelines within the context of their role and scope of practice. In other words, the guidelines do not substitute for the need for skill, practice, or supervision, and expert clinical judgment should be used when applying them.

#### **Core competencies**

These evidence-based guidelines are not designed to teach core clinical skills and do not replace specialist training courses. To use them, you will require competency in the following areas:

- basic counselling skills, such as building a therapeutic alliance, active listening, active reflections
- · general alcohol and other drug assessment
- knowledge of common mental health conditions, such as anxiety and depression
- evidenced-based interventions, such as motivational enhancement therapy and cognitive behavioural therapy
- cultural sensitivity
- skills to engage young people.

#### **Evidence and recommendation rating system**

The Australian National Health and Medical Research Council (NHMRC) and similar organisations internationally are developing a process for assessing evidence and formulating recommendations for clinical guidelines. This process involves the development of a new evidence hierarchy that builds upon the NHMRC's "Level of Evidence" but is less restrictive, and allows for the grading of studies that involve diagnosis, prognosis, ætiology, and screening.

Details of the consultation levels and grades can be found at http://www.nhmrc.gov.au

The five components that are considered in judging a body of evidence are:

- volume of evidence (which includes the number of studies, sorted by their methodological quality and their relevance to patients)
- consistency of study results
- potential clinical effect of the proposed recommendation (including the balance of risks and benefits, the relevance of the evidence to the clinical question, the size of the patient population, and resource matters)

- generalisability of the body of evidence to the target population
- applicability of the body of evidence to the Australian health-care context.

For the current guidelines, the literature has been reviewed by at least two experts and endorsed by a wider panel of clinicians and researchers with specific cannabis knowledge and expertise. The recommendation is summarised at the end of each chapter and given a grade based on the following:

Grade	Recommendation
Α	Body of evidence can be trusted to guide practice
В	Body of evidence can be trusted to guide practice in most situations
С	Body of evidence provides some support for recommendation(s), but care should be taken in its application
D	Body of evidence is weak, and recommendation must be applied with caution

More information about the grading process can be found in Appendix 1.

All URLs given were accessed in June 2009.

## chapter 1: background information

#### 1.1 Cannabis prevalence

Cannabis is the most widely used illicit substance in the western world. During the 1990s, incidence of cannabis use increased, particularly among young people. Recent data suggest that the upward trend is levelling off, albeit at historically high levels (see Table 1) (EMCDDA, 2008).

### Prevalence and patterns of cannabis use in Australia

In 2007, of 17.2 million Australians aged 14 years or older, one in three (33.5%, about 5.8 million) had used cannabis at some point in their lives; almost one in ten (9.1%, 1.6 million) had used cannabis in the previous 12 months; and more than 600,000 (3.5%) had used it in the week before the survey (AIHW, 2008a). Higher rates are noted in particular subgroups. Amongst indigenous populations, for example, rates of weekly cannabis use of up to forty-five per cent have been reported (Clough et al., 2004). Higher rates are noted amongst young people also and amongst those with mental health diagnoses.

### Prevalence and incidence of cannabis use in the U.S.

In 2007, approximately 40% of Americans aged 12 years or older reported having used cannabis at some stage in their life. Use in the past month was approximately 5.8% (14.4 million). The majority of current users were under age 25 (highest rates in 18-to 20-year-olds) and male (SAMHSA, 2008).

### Prevalence and incidence of cannabis use in Europe

Of all Europeans aged 15–64 years, approximately 20% (65 million) had tried cannabis at least once in their lives; 1–11% had used cannabis in the previous year; and approximately half of the latter had used cannabis in the last month (EMCDDA, 2008).

Table 1: 2008 Prevalence of cannabis abuse as percentage of the population aged 15–64

Europe	
Western and central	0.8-11.2%
Southeastern	0.9-4%
Eastern	1.5-3.9%
America	
Central	1.3-6.7%
North	3.1-17%
South	1.6-7%
Caribbean	1.9-10.7%
Oceania	0.1-29.5%
Africa	
East	0.2-9.1%
North	0.05-9.6%
Southern	2.1-17.7%
West and central	0.9-21.5%
Asia	
Asia Central	3.4-6.4%
	3.4-6.4% 0.002-4.2%
Central	2
Central East & South-East Near & Middle East/South West	0.002-4.2%

N.B. This chart contains United Nations Office of Drugs and Crime estimates based on local studies, studies of special population groups, and/or law-enforcement agencies' assessments (UNODC, 2008).

#### 1.2 Dosage

The global cannabis commission report on cannabis (Room et al., 2008) suggests that a typical joint contains between 0.25g and 0.75g of cannabis plant matter but that the actual amount of THC absorbed depends on multiple factors and is difficult to quantify.

The proportion of THC delivered to the lungs has been estimated to range from 20% to 70%. The bioavailability of THC (the fraction of THC that reaches the bloodstream or brain) is reported to be from 5% to 24% (Hall & Solowij, 1998; Heustis et al., 2005; Iversen, 2007).

#### 1.3 Potency

Cannabis is a plant that contains at least 60 active chemicals known as cannabinoids, several of which are biologically active. The potency (or strength) of cannabis is known to vary widely depending upon the variety and growing conditions (WHO, 1997). In relation to potency, the cannabinoids of greatest interest are tetrahydrocannabinol (THC) and cannabidiol (CBD). THC is responsible for most of the psychoactive effects of cannabis, including the "high". Recent studies suggest that CBD has antipsychotic and anxiolytic properties (Potter, Clark, & Brown, 2008) that may offset some of the psychoactive effects of THC. Morgan and Curran (2008) suggested that the potency of cannabis is not due simply to the amount of THC in the sample, but also to the ratio of THC to CBD. The media have claimed that cannabis potency has increased 20- to 30-fold in recent decades; research suggests, however, that cannabis potency has at least doubled in the past 10 years (McLaren et al., 2008).

Below is a brief summary of countries that have examined cannabis potency:

#### 1.4 Demand for treatment

In Australia, between 2005 and 2006, 44% of all treatment presentations to government alcohol and other drug treatment services included cannabis as a drug of concern (AIHW, 2008b). Cannabis was the primary concern in 23% of these cases. It was the most common principal drug of concern, followed by alcohol, for adolescents aged 10-19 years (AIHW, 2008b). In the United States and the European Union, treatment admissions are slightly less commonly for cannabis. Since 2001, rates of treatment admission for cannabis have stayed relatively stable at 15–16% (SAMHSA, 2009). For example, the Treatment Episode Data Set found that cannabis problems were involved in 16% of admissions to publicly funded U.S. alcohol and other drug treatment services (SAMHSA, 2009). In the European Union, cannabis was the second-most common illicit drug of primary concern, with 15% of all clients and 27% of new clients presenting with a primary cannabis problem (EMCDDA, 2008).

The number of client presentations for cannabis to alcohol and other drug treatment programs is increasing in all western countries. From 1996 to 2003, cannabis treatment provision accounted for the greatest increase in drug of principal concern in the EU. Since 1993, the U.S. has seen a doubling of requests for treatment for cannabis use relative to its population (SAMHSA, 2002). Minor increases have been noted in Australia from 2000 to 2007 (AIHW, 2008b).

Reference	Location	Sample size	THC concentration
Advisory Council on the Misuse of Drugs (2008)	UK	2,921	Herbal cannabis mean = 16.2% (4.1-46) Resin mean = 5.9% (1.3-27.8)
EMCDDA (2004)	European Union and Norway (1998-2002)	59,369	Herbal cannabis mean = 7.7% Resin mean= 8.2%
ElSohly et al. (2000)	USA (1980-1997)	35,213	Herbal cannabis=2% (1980) 4.5% (1997)
Poulsen & Sutherland (2000)	NZ (1976-1996)	1,066	Cannabis leaf mean = 1%, heads 3.5% Cannabis oil mean = 13.5% (1995)

Though the numbers seeking treatment are high, the majority of cannabis users do not seek professional support for their cannabis use (Agnosti & Levin, 2004). This may be for a number of reasons, including: believing that treatment for cannabis use is unnecessary; not being motivated to stop using; and feeling that treatment is stigmatising (Gates et al., 2008). When cannabis users present to non-specialist services such as general medical practitioners, they usually do so for a secondary concern, such as anxiety or depression, rather than specifically for their cannabis use (Roxburgh & Degenhardt, 2008). Additionally, cannabis dependence may be seen as qualitatively different from the problems of populations seen in conventional "drug treatment" agencies. An individual may, therefore, conclude that he or she will not have anything in common with the clients of those conventional agencies, and that the programs and services offered at those agencies will not be relevant to cannabis dependence.

#### 1.5 Cannabis-related problems

Although the short-term negative consequences of cannabis use are fairly well-known, the long-term effects of regular cannabis use are less so. Determining the long-term effects of cannabis has been difficult, due to many factors, including high rates of multiple drug use, a long lead time for long-term effects to become apparent, and a lack of literature examining harmful use, although this is now changing. A summary of known health concerns is given in Table 2.

Table 2: Harms associated with cannabis use

Risks of acute intoxication	<ul> <li>impaired attention, memory, and psychomotor performance while intoxicated</li> <li>cannabis-induced psychosis</li> <li>increased risk of motor-vehicle accidents</li> </ul>
Most probable chronic effects	<ul> <li>subtle cognitive impairment in attention, memory, and the organisation and integration of complex information (of unknown reversibility, though not likely to be grossly debilitating)</li> <li>increased risk of developing a dependence syndrome</li> <li>adverse respiratory effects, such as chronic bronchitis (greater if cannabis is used with tobacco)</li> </ul>
Possible chronic effects	<ul> <li>increased exposure to xerostomia (dry mouth), which can lead to tooth decay, gum disease, and other oral-health issues</li> <li>some evidence that cannabis may affect human female fertility (cannabis has been found to reduce sperm count and testosterone levels in some male animals, but this has not been established in humans)</li> <li>in children who have been exposed to cannabis in the womb, more difficulties with problem-solving and attention, which may continue into adulthood and reduce education potential</li> <li>an increased likelihood of pre-cancerous changes</li> <li>increased rate of lung cancer</li> <li>increased possibility of heart attack in people who have risk factors for heart disease (e.g. obesity and/or cigarette smoking)</li> </ul>
Probable risks amongst specific populations	<ul> <li>associated with adolescent cannabis use:</li> <li>poorer school performance and outcomes</li> <li>lower levels of degree attainment by age 25</li> <li>higher unemployment</li> <li>lower levels of life satisfaction</li> <li>leaving the family home</li> <li>early sexual activity and teenage pregnancy</li> <li>other illicit drug use and dependence</li> <li>in women who continue to smoke cannabis during pregnancy, increased risk of having a low-birthweight baby (which can lead to mortality, morbidity, and disability)</li> <li>exacerbation of some mental health conditions such as depression, anxiety, and schizophrenia</li> </ul>

Adapted from Hall & Solowij, (1998); Room et al., (2008)

### 1.6 Cannabis intoxication, abuse, and dependence

Assessing dependence and abuse can be an important clinical tool for communicating with other professionals, communicating the nature of the issue to the client, and assessing outcomes. It can be done using structured clinical interviews and questionnaires. Two major international classification systems exist for mental disorders: the International Classification of Disorders, version 10 (ICD-10) (WHO, 1992) and the Diagnostic and Statistical Manual, Version IV (DSM-IV-TR) (APA, 2000). The latter is the most commonly used system in the U.S. and the former, in Europe and in Australia. The diagnostic criteria for cannabis intoxication, abuse, and dependence according to each classification system are listed below. Note that the DSM-IV-TR includes a disorder specific to cannabis use, whereas the ICD-10 specifies only a generic diagnosis.

#### A) Acute cannabis use

#### DSM-IV-TR cannabis intoxication

The essential feature of cannabis intoxication is the development of behavioural and psychological disturbances (e.g. impaired motor coordination, euphoria, anxiety, sensation of slowed time, impaired judgment, social withdrawal) during, or shortly after, cannabis use. The psychoactive effects are accompanied by two (or more) of the following signs, developing within two hours of cannabis use: conjunctival injection (bloodshot eyes), increased appetite, dry mouth, and tachycardia (rapid heart rate). These symptoms are not due to a general medical condition and are not better accounted for by another mental disorder.

The pattern of onset and duration of cannabis intoxication is variable. If cannabis is smoked, intoxication usually occurs within minutes and lasts approximately three to four hours. Onset may take hours and the effects may be longer lasting, however, when cannabis is consumed orally. The DSM-IV-TR notes that the magnitude of effects will vary with dose, administration route, and personal characteristics, such as tolerance of and sensitivity to cannabis.

Importantly the DSM-IV-TR adds a qualifier, with perceptual disturbances, to cannabis intoxication in which the individual experiences hallucinations with intact reality testing or in whom auditory, visual, or tactile illusions occur in the absence of a delirium. In other words, this qualifier is noted only when the user realises that the perceptual disturbances are induced

by cannabis use. This experience is distinguished from substance-induced psychotic disorder.

#### ICD-10 acute intoxication

Acute intoxication is a transient condition that follows the administration of alcohol or other psychoactive substance and results in disturbances in level of consciousness; cognition; perception; affect; behaviour; or other psycho-physiological functions. The ICD-10 specifies that this diagnosis should be a main diagnosis only in cases in which intoxication occurs in the absence of more-persistent alcohol- or drug-related problems. When such problems exist, precedence should be given to diagnoses of harmful use (f1x.1), dependence syndrome (f1x.2), or psychotic disorder (f1x.5).

#### B) Cannabis abuse and harmful use

of caminable abase and narminal asc			
ICD-10 (WHO, 2004) Harmful use	DSM-IV-TR (APA, 2000) Abuse		
<ul> <li>psychoactive substance use that causes damage to the physical or mental health of the user</li> <li>harmful patterns of use are criticised frequently by others</li> <li>harmful patterns of use are associated frequently with adverse social consequences</li> </ul>	<ul> <li>maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12-month period:</li> <li>recurrent failure to fulfil major role obligations at work, school, or home</li> <li>recurrent cannabis use in situations in which it is physically hazardous</li> </ul>		

#### C) Cannabis dependence

Making a diagnosis of cannabis dependence helps clinicians to give feedback about the harms associated with their client's cannabis use. Dependence is characterised by marked distress resulting from a recurring cluster of problems that reflect impaired control over cannabis use and continuing cannabis use despite harms arising from it. See Table 3 for a list of the criteria in both classification systems.

#### Table 3: Cannabis-dependence criteria (ICD-10 and DSM-IV-TR)

Both classification systems state that a diagnosis is made if three of the following have occurred within a 12-month period:

ICD–10 (WHO, 2004) dependence criteria	DSM-IV-TR (APA, 2000) dependence criteria
A strong desire or sense of compulsion to take cannabinoids	There is a persistent desire to use cannabis, or there has been one or more unsuccessful efforts to cut down or control cannabis use
Difficulties in controlling cannabinoid-taking behaviour in terms of its onset, termination, or levels of use	Cannabis is taken in larger amounts or over a longer period than the person intended
A physiological withdrawal state when cannabinoid use has ceased/reduced, as evidenced by a withdrawal syndrome for cannabinoid; or use of the same (or a closely related) substance with the intention of relieving or avoiding withdrawal symptoms	Withdrawal, characterised by either of the following:  a) symptoms of withdrawal b) the same substance is taken to relieve or avoid withdrawal symptoms
Evidence of tolerance, such that increased doses of cannabinoid are required in order to achieve effects originally produced by lower doses	Tolerance, as defined by either of the following:  a) a need for markedly increased amounts of the substance to achieve intoxication or desired effect;  b) markedly diminished effect with continued use of the same amount of the substance
Progressive neglect of alternative pleasures or interests because of cannabinoid use or an increased amount of time necessary to obtain or take the substance or to recover from its effects	A great deal of time is spent in activities necessary to get cannabis (e.g. using cannabis or recovering from its effects)
Persisting with cannabis use despite clear evidence of overtly harmful consequences (though efforts should be made to determine that the user was actually, or could be expected to be, aware of the nature and extent of the harm)	Continued cannabis use despite knowledge of having persistent or recurrent social, psychological, or physical problems that are caused or exacerbated by the use of cannabis
Narrowing of the personal repertoire of patterns of cannabinoid use has also been described as a characteristic feature	Important social, occupational, or recreational activities are given up or have been reduced because of cannabis use

#### 1.7 Risk of dependence

The majority of people who try cannabis do not become dependent on it. The adult lifetime prevalence rates for cannabis dependence are around 9–15% (Degenhardt, Hall, & Lynskey, 2001; Anthony, Warner, & Kessler, 1994). As with other drugs, the risk of developing dependence appears to be greatest amongst those with a history of frequent or daily cannabis use and those who initiate use early (Coffey et al., 2002).

#### 1.8 Cannabis withdrawal syndrome

Clinical studies over the last decade have produced evidence for a cannabis withdrawal syndrome. Currently, these symptoms are not documented in the DSM-IV-TR or the ICD-10. The proportion of clients reporting cannabis withdrawal in treatment studies has ranged from 50% to 95% (Budney & Hughes, 2006). Symptoms typically emerge after one to three of days of abstinence, peak between days two and six, and typically last from four to 14 days (Budney et al., 2003). The severity of withdrawal symptoms has been linked with difficulty achieving abstinence (Stephens, Roffman, & Simpson, 1993; Copeland et al., 2001; Budney et al., 2000). Discussing withdrawal may therefore be an important aspect of treatment. We recommend using psycho-education (see "worksheets" section) to indentify typical withdrawal symptoms and patterns, so that dealing with withdrawal can be incorporated into a treatment plan.

The most commonly experienced withdrawal symptoms appear in Table 4.

Table 4: Cannabis-withdrawal symptoms

Symptom	Duration	Prevalence
Anger, aggression, irritability	Few days to 3 weeks	Highly prevalent
Anxiety/nervousness	Few days to 3 weeks	Highly prevalent
Restlessness	Few days to 3 weeks	Highly prevalent
Sleep difficulties, including strange dreams	Few days to 4+ weeks	Highly prevalent
Craving	Few days	Common
Weight change/decreased appetite	Generally in the first week	Common
Depressed mood	Unclear, generally 4+ weeks	Less common
Physical discomfort: stomach pain, chills, sweating, or shakiness	Few days to 3 weeks	Less common

#### 1.9 Cannabis treatments

Attracting clients to treatment is a challenge for many services offering treatment for substance use, including those managing cannabis-related problems. Stephens et al. (2007) reported that of those who met the criteria for cannabis dependence or abuse in 2003, only 9.8% reported receiving treatment, a lower proportion than of those meeting the criteria for other drug types. Unfortunately, as with other drugs, many people resume using cannabis after they have completed treatment. Despite this, treatment improves their lives by helping them reduce the amount of cannabis they use and mitigating the associated health and social problems. As we learn more about cannabis and its users' related problems, moreeffective treatment will be developed and evaluated. Current research into cannabis-specific interventions is summarised below.

#### A) Psychological interventions

To date, nine randomised trials for adults with cannabis abuse/dependence have been reported in the published literature (Budney & Hughes, 2006). Results indicate that behaviourally based outpatient treatments are effective for reducing cannabis consumption and engendering abstinence. Cognitivebehavioural therapy (CBT) has been the cornerstone of most interventions (Budney et al., 2007). CBT includes teaching and practice of behavioural and cognitive skills to deal with risk factors (drug refusal, coping with craving, managing mood, avoiding environments offering high risk of drug use, finding alternative activities, etc.). It essentially focuses on how the person feels about and responds to thoughts and experiences and on ways of tackling negative thoughts.

A range of behaviour-based treatment options have been shown to be efficacious in the treatment of cannabis dependence. These include Motivational Enhancement Therapies (MET) and a combination of Cognitive Behavioural Therapy (CBT) and Contingency Management (CM). These approaches will be discussed in detail in chapter six.

#### B) Pharmacological interventions

Currently, there are no approved medications for cannabis dependence or withdrawal-related symptoms. Research over the past ten years has begun to explore medications that may either block the symptoms of cannabis withdrawal or block the effects of cannabis. These types of medications are still in an experimental stage. Further information is included in chapter five.

#### C) Self-help/mutual-support groups

Whilst there are no outcome studies, cannabis users may find peer-support programs helpful as has been reported by those with alcohol and other drug problems. A self-help group is any group that has the aim of providing support, practical help, and care for group members who share a common problem. The two most widely available types of support groups are (1) Marijuana Anonymous/Narcotics Anonymous and (2) Self Management and Recovery Training (SMART) groups.

Narcotics Anonymous (NA) and the specifically designed Marijuana Anonymous (MA) are 12-step, spiritually-based groups. The primary purpose of MA is "to stay free of cannabis and to help the cannabis addict who still suffers achieve the same freedom". No experimental studies unequivocally demonstrated the effectiveness of alcoholics anonymous or 12-step approaches for reducing alcohol dependence or problems (Ferri, Amato, & Davoli, 2006), and none exist for cannabis. Clients wishing to attend such groups should not be discouraged from doing so.

Other mutual-support groups, not based on the 12-step model, such as SMART (Self Management

and Recovery Training) groups (including online groups), are also available in many countries (e.g. <a href="http://www.smartrecoveryaustralia.com.au/">http://www.smartrecoveryaustralia.com.au/</a>). These groups are based on CBT principles, are practical and solution-focused, and teach group members to:

- enhance and maintain motivation to abstain;
- cope with urges;
- problem-solve (managing thoughts, feelings, and behaviours);
- balance their lifestyles (balancing momentary and enduring satisfactions)

To date there are no outcome data available on the SMART program. In an internal evaluation of Sydney participants, more than four out of every five (83%, or 90) respondents indicated that they thought that the programme had given them "lots of help" (AER, 2006).

#### 1.10 Policy response to cannabis harms

Australian cannabis policy currently is guided by the National Cannabis Strategy 2004–2009 (Commonwealth of Australia, 2006), which encompasses:

- supply reduction strategies to disrupt the production and supply of illicit drugs and to control and regulate licit substances;
- demand reduction strategies to prevent the uptake of harmful drug use, including abstinenceoriented strategies and treatment to reduce drug use: and
- harm reduction strategies to reduce drug-related harm to individuals and communities

A number of countries, particularly Australia and France, have established specialised cannabistreatment clinics to improve treatment access for those with cannabis-related problems. Cannabis remains illegal in all states of Australia, but it has been decriminalised in some states. Decriminalisation involves replacing penal sanctions (i.e. imprisonment) with civil penalties (i.e. fines and education).

States with prohibition with civil penalties (infringement notices) are:

- South Australia (1987)
- Australian Capital Territory (1992)
- Northern Territory (1996)
- Western Australia (2004)

States using prohibition with cautioning:

- Tasmania (1998)
- Victoria (1998)
- New South Wales (2000)
- Queensland (2001)

### 1.11 International approaches to criminal sanctions

Drugs laws are guided by the 1988 United National Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances. The convention established a difference between the intent of trafficking and the possession, purchase, and cultivation of substances for personal consumption. In various countries, the possession of a quantity of cannabis for personal use is decriminalised, and there are many other countries in which it is no longer a priority for law enforcement or in which sentences have been reduced (Jelsma, 2008).

Decriminalisation laws exist in many E.U. countries (including Belgium, Italy, the Czech Republic, Portugal, and Denmark) and in some U.S. states. Some jurisdictions in Europe (Spain and parts of the Netherlands and Germany) maintain cannabis's illegality but do not enforce it, resulting in "de facto legalisation" of possession in some circumstances of small amounts of the drug. In parts of the most well-known example, the Netherlands, the sale of up to 5g of cannabis to adults in retail coffee shops is permitted.

### Summary of laws

Cannabis remains illegal across the world, but a number of countries have lessened the penalties for possession of small quantities of cannabis, so that it is punished by a fine and/or education rather than imprisonment. See NCPIC Criminal Justice Bulletin, March 2009, for more details. www.ncpic.org.au

#### 1.12 References

Alcohol Education and Rehabilitation Foundation (AER). (2006). St Vincent's Hospital Alcohol and Drug Service Final Report: Smart Recovery. Sydney: AER.

Advisory Council on the Misuse of Drugs. (2008). Home Office Cannabis Potency Study. Available on line: http://drugs.homeoffice.gov.uk/publicat ... iew=Binary

**Agnosti, V. & Levin, F.** (2004). Predictors of treatment contact among individuals with cannabis dependence. *The American Journal of Drug and Alcohol Abuse 30(1)*, 121–127.

American Psychiatric Association (APA). (2000). *Diagnostic and Statistical Manual of Mental Disorders*, 4th edn. (DSM-IV-TR). Arlington, VA: APA.

Anthony, J.C., Warner, L.A. & Kessler, R.C. (1994). Comparative epidemiology of dependence on tobacco, alcohol, controlled substances, and inhalants: Basic findings from the National Comorbidity Survey. *Experimental and Clinical Psychopharmacology 2*, 244–268.

Australian Institute of Health and Welfare. (2008a). National Drug Strategy Household Survey: First Results. Drug statistics series no. 20. AIHW cat. no. AUS 104. Available on line: <a href="http://www.aihw.gov.au/publications/index.cfm/title/10579">http://www.aihw.gov.au/publications/index.cfm/title/10579</a>

Australian Institute of Health and Welfare. (2008b). Alcohol and other drug treatment services in Australia 2006–07: Findings from the National Minimum Data Set. Available on line: <a href="http://www.aihw.gov.au/">http://www.aihw.gov.au/</a> publications/index.cfm/title/10591

**Budney, A.J. & Hughes, J.R.** (2006). The cannabis withdrawal syndrome. *Current Opinion in Psychiatry 19*, 233-238.

Budney, A.J., Higgins, S.T., Radonovich, K.J., & Novy, P.L. (2000). Adding voucher-based incentives to coping skills and motivational enhancement improves outcomes during treatment for marijuana dependence. *Journal of Consulting and Clinical Psychology 68*(6), 1051–1061.

Budney, A.J., Moore, B.A., Vandrey, R.G., & Hughes, J.R. (2003). The time course and significance of cannabis withdrawal. *Journal of Abnormal Psychology* 112(3), 393–402.

Budney, A.J., Roffman, R., Stephens, R.S., & Walker, D. (2007). Marijuana dependence and its treatment. *Addiction Science & Clinical Practice* 4(1), 4–16.

Clough, A., d'Abbs, P., Cairney, S., Gray, D., Maruff, P., Parker, R., & O'Reilly, B. (2004). Emerging patterns of cannabis and other substance use in Aboriginal communities in Arnhem Land, Northern Territory: A study of two communities. *Drug and Alcohol Review* 23(4), 381–390.

Coffey, C., Carlin, J.B., Degenhardt, L., Lynskey, M., Sanci, L., & Patton, G.C. (2002). Cannabis dependence in young adults: An Australian population study. *Addiction* 97, 187–194.

Copeland, J., Swift, W., Roffman, R., & Stephens, R. (2001). A randomised controlled trial of brief cognitive—behavioural interventions for cannabis use disorder. *Journal of Substance Abuse Treatment 21*, 55–64.

Commonwealth of Australia. (2006). *National Cannabis Strategy 2006–2009*. Available on line: http://www.ag.gov.au/cca

**Degenhardt, L., Hall, W. & Lynskey, M.** (2001). The relationship between cannabis use and other substance use in the general population. *Drug and Alcohol Dependence* 64(3), 319–327.

ElSohly, M.A., Ross, S.A., Mehmedic, Z., Arafat, R., Yi, B., & Banahan, B.F. (2000). Potency trends of delta-9-THC and other cannabinoids in confiscated marijuana from 1980–1997. *Journal of Forensic Science* 45, 24–30.

**EMCDDA**. (2004). *EMCDDA insights: An overview of cannabis potency in Europe*. Lisbon: European Monitoring Centre for Drugs and Drug Addiction.

**EMCDDA.** (2008). A cannabis reader: Global issues and local experiences. Monograph series 8, Volume 1. Lisbon: European Monitoring Centre for Drugs and Drug Addiction.

Ferri, M., Amato, L. & Davoli, M. (2006). Alcoholics Anonymous and other 12-step programmes for alcohol dependence. *Cochrane Database of Systematic Reviews* 3 (art. no. CD005032). Available on line: <a href="http://dx.doi.org/doi:10.1002/14651858.CD005032.pub2">http://dx.doi.org/doi:10.1002/14651858.CD005032.pub2</a>

Gates, P., Taplin, S., Copeland, J., Swift, W., & Martin, G. (2008). *Barriers and facilitators to cannabis treatment*. Bulletin no. 4. Available on line: http://www.ncpic.org.au

Hall, W. & Solowij, N. (1998). Adverse effects of cannabis. *Lancet 352*, 1611–1616.

Huestis, M.A., Barnes, A. & Smith M.L. (2005). Estimating the time of last cannabis use from plasma  $\Delta^9$ -tetrahydrocannabinol and 11-nor-9-carboxy- $\Delta^9$ -tetrahydrocannabinol concentrations. *Clinical Chemistry* 51(12), 2289–2295.

**Iversen, L.** (2007). *The science of marijuana*, 2nd ed. New York. NY: Oxford University Press.

Jelsma, M. (2008). The current state of drug policy debate: Trends in the last decade in the European Union and United Nations. Support text for the first meeting of the Latin American Commission on Drugs and Democracy. Available on line: http://www.ungassondrugs.org/index.php?Option =com\_content&task=view&id=206&Itemid=79

McLaren, J., Swift, W., Dillon, P., & Allsop, S. (2008). Cannabis potency and contamination: A review of the literature. *Addiction* 103(7), 1100–1109.

Morgan, C. & Curran, H. (2008). Effects of cannabidiol on schizophrenia -like symptoms in people who use cannabis. *The British Journal of Psychiatry* 192, 306–307.

Potter, D., Clark, P. & Brown, M. (2008). Potency of Δ9-THC and other cannabinoids in cannabis in England in 2005: Implications for psychoactivity and pharmacology. *Journal of Forensic Science* 53(1), 90–94.

**Poulsen, H.A. & Sutherland, G.J.** (2000). The potency of cannabis in New Zealand from 1976 to 1996. *Science Justice 40*, 171–176.

Room, R., Fischer, B., Hall, W., Lenton, S., & Reuter, P. (2008). *The global cannabis commission report:*Cannabis policy: Moving beyond stalemate. Oxford:
The Beckley Foundation. Available on line:
<a href="http://www.beckleyfoundation.org/pdf/BF\_Cannabis\_Commission\_Report.pdf">http://www.beckleyfoundation.org/pdf/BF\_Cannabis\_Commission\_Report.pdf</a>

**Roxburgh, A. & Degenhardt, L.** (2008). Characteristics of drug-related hospital separations in Australia. *Drug and Alcohol Dependence 92*(1), 149–155.

Stephens, R.S., Roffman, R., Fearer, S., Williams, C., & Burke, R. (2007). The marijuana check-up: Promoting change in ambivalent marijuana users. *Addiction* 102(6), 947–957.

Stephens, R.S., Roffman, R.A. & Simpson, E.E. (1993). Adult cannabis users seeking treatment. *Journal of Consulting & Clinical Psychology 61*, 1100–1104.

Substance Abuse and Mental Health Services Administration (SAMHSA), Office of Applied Studies. (2002). *National Survey on Drug Use and Health*. Rockville, MD: Office of Applied Studies.

Substance Abuse and Mental Health Services Administration (SAMHSA), Office of Applied Studies. (2008). Results from the 2007 National Survey on Drug Use and Health: National Findings. NSDUH series no. H-34, DHHS publication no. SMA 08-4343. Rockville, MD: Office of Applied Studies.

Substance Abuse and Mental Health Services Administration (SAMHSA), Office of Applied Studies. (2009). Treatment Episode Data Set (TEDS) Highlights: 2007 National admissions to substance abuse treatment service. OAS series no. S-45, DHHS publication no. SMA 09-4360. Rockville, MD: Office of Applied Studies.

**UNODC.** (2008). *World Drug Report 2008*. Available on line: <a href="http://www.unodc.org">http://www.unodc.org</a>

World Health Organization (WHO). (1992). ICD-10: The ICD-10 classification of mental and behavioural disorders: Clinical descriptions and diagnostic quidelines. Geneva: WHO.

**World Health Organization (WHO).** (1997). *Cannabis: A health perspective and research agenda*. Geneva: WHO.

# chapter 2: working with cannabis users

### 2.1 General principles of working with cannabis users

Whilst treatment-outcome research suggests that most therapies when directly compared in randomised controlled trials are equally effective, research has demonstrated that a strong therapeutic relationship is a necessary, but not sufficient, condition for effective psychotherapy. According to Ackerman & Hilsenroth (2003), a strong therapeutic relationship involves flexibility, honesty, respect, trustworthiness, warmth, confidence, interest, and openness. Ultimately, the effectiveness of therapy relies on the ability to establish a therapeutic relationship and on the skills and specialist knowledge of the counsellor. This is especially true of working in the cannabis area, as the majority of cannabis users do not voluntarily seek help for their cannabis use and therefore interventions may be opportunistic and need to be tailored to users who could be ambivalent about making changes to their drug use. In addition, cannabis use may be secondary to other drug use, health concerns, or mental health conditions.

#### Working with clients who use cannabis – key tips

Given the variety of treatment settings, other than alcohol and other drug centres, that cannabis users may access, it is important that general assessments capture cannabis use

Assessment should be considered integral to the engagement and treatment process rather than an independent process

Engagement early in the course of using offers the opportunity to intervene before behaviours become engrained. Use of motivational interviewing approaches is suggested, in order to enhance engagement

Empirically-based cannabis interventions should be explained to the client and incorporated into a comprehensive treatment plan, with goals and intensity of the treatment individualised

When relevant, cannabis use may be addressed in the context of other drug use

Interventions may need to be applied repeatedly before significant change is achieved, because drug use, including use of cannabis, is a cyclical and relapsing condition

Some clients may have other coexisting disorders that affect all stages of the change process

Determine treatment goals , which involve interim, incremental, and even temporary steps toward ultimate goals

Integrate substance abuse treatment with services such as mental health or criminal justice ones to best meet complex needs

#### 2.2 Intensity of treatment

Stepped care involves the provision of a series of interventions, from the least to the most intensive, with each incremental step made available on the basis of the client's response to the previous one. A stepped care approach provides a best-practice framework for integrating assessment, case formulation, and treatment planning into the treatment process, and is useful for determining what level of intervention an individual requires. For example, a brief motivational intervention may be sufficient for some but not for other users. Clients who do not improve after a brief intervention can be stepped up to the next level of care (e.g. a 12-session outpatient treatment). If they continue to experience problems, a more comprehensive treatment plan may be needed (e.g. treatment of comorbid conditions; family involvement; etc.). The level of intervention required for success may not necessarily relate to level of use (i.e., not all heavy cannabis users will require such a comprehensive treatment program).

Since individuals with concurring mental health and alcohol and other drug problems are a very heterogeneous group in terms of type, severity, and readiness to address their various problems in treatment, a stepped care approach to treatment can allow for flexibility in intervention. A graded approach to treatment can:

- allow for flexibility in the intervention and match the treatment to the client's needs.
   That is, clients with more severe dependence should be encouraged to engage in more intensive interventions (ranging from longer and more frequent outpatient visits to residential rehabilitation). As well as linking treatment intensity with the severity of the problem, treatment matching also considers the client's motivations, cognitive functioning, and other variables, such as age, gender, cultural issues, and underlying psychological issues
- increase service access by reducing unnecessarily intensive interventions for those with minor cannabis-related issues
- optimise use of resources such as practitioner time

#### 2.3 General principles of cannabis interventions

There are a number of principles clinicians should consider when providing treatment for cannabis dependence:

 client progress may be variable, therefore interventions (including those that are manualised) will need to be tailored as required

- basic counselling skills are important for engaging cannabis users, including empathy and using open-ended questions
- early dropout (i.e. attending for only one session) is common, therefore prioritising the key messages and working on establishing engagement and on building motivation for change in the first session is important
- research has not yet established the optimum number of sessions to offer dependent cannabis users. Studies do suggest that single sessions can be effective, but continued care may be appropriate and is dependent on complexity of presentation and on motivational issues of the client

#### 2.4 Setting

#### Primary health-care interventions

Primary health-care settings provide an excellent opportunity for delivering brief interventions to address problematic cannabis use. In most cases, clients will not present in these settings requesting help for cannabis. This is where screening tools and making enquiries about lifestyle issues (which include drug use) that may contribute to presenting health concerns is important. Whilst some clients may avoid conversations about their drug use, others will be relieved that they did not have to bring it up. In addition, clinicians and general practitioners may need to look out for signs that clients are making subtle inquiries to see whether it is safe to talk about cannabis use. At a minimum, such settings are encouraged to provide pamphlets, and basic screening and detection are strongly encouraged.

#### Outpatient/client interventions

Consistent with other substance use-disorder counselling interventions, the majority of episodes of care for cannabis will be for brief (e.g. one- to five-session) interventions. This is consistent with the evidence base and with the patterns reported in treatment data sets. The screening and assessment sections within these guidelines give suggestions for domains of assessment, and the brief intervention section provides outlines for treatment options. Clinicians in outpatient services should be proficient in assessing and delivering brief interventions. These guidelines will assist in the development of a resource guide for clients. This may include a list of local support groups and self-help material.

#### In-patient and residential services

Whilst these guidelines suggest that the first line of treatment for cannabis issues is outpatient

intervention, clients experiencing severe withdrawal, multiple drug dependence (more specifically alcohol or benzodiazepine dependence), and acute or severe mental health problems have the highest risk of adverse consequences during withdrawal and may require in-patient/residential treatment. In these settings, cannabis use may be not specifically targeted but dealt with in the context of a general drug and alcohol abstinence program. The worksheets provided at the back of the guidelines can be used to individually work with clients wanting to address cannabis use during in-patient treatment. Given the prevalence, among illicit drug users, of cannabis use and comorbid substance use dependence, we strongly recommended that in-patient and residential treatment services offer at least one group that specifically targets cannabis use.

#### 2.5 Further reading

Addy, D., Ritter, A., Lang, E., Swan, A., & Engelander, M. (2000). *Key principles and practices*. Clinical treatment guidelines for alcohol and drug clinicians no. 1. Fitzroy, Victoria: Turning Point Alcohol and Drug Centre Inc.

Gates, P., Taplin, S., Copeland, J., Swift, W., & Martin, G. (2009). *Barriers and facilitators to cannabis treatment*. NCPIC Technical Report # 1. Sydney: NCPIC. Available online: <a href="http://www.ncpic.org.au">http://www.ncpic.org.au</a>

Jarvis, T., Tebbutt, J., Mattick, R., & Shand, F. (2005). *Treatment approaches for alcohol and drug dependence*, 2nd edn. London: John Wiley and Sons.

Marsh, A. & Dale, A. (2006). *Addiction counselling: Content and process*. East Hawthorn, Vic: IP Communications.

Miller, W. & Heather N. (1998). *Treating addictive behaviours*, 2nd edn. New York: Plenum Press.

**NSW Department of Health.** (2008). NSW Health drug and alcohol psychosocial interventions: Professional practice guidelines. Available on line: http://www.health.nsw.gov.au

Steinberg, K.L., Roffman, R.A., Carroll, K.M., Mcree, B., Babor, T.F., Miller, M., Kadden, R., Duresky, D., & Stephens, R. (2005). *Brief counselling for marijuana dependence: A manual for treating adults*. DHHS publication no. [SMA] 05-4022. Rockville, MD: Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration.

#### 2.6 Reference

Ackerman, S.J. & Hilsenroth, M.J. (2003). A review of therapist characteristics and techniques positively impacting the therapeutic alliance. *Clinical Psychology Review 23*, 1–33.

## chapter 3: screening for cannabis use

Consistent with usual best practice, the initial meeting with a client should focus on engagement and identification of cannabis-related issues. Screening is most relevant for generalist settings, such as primary health care, workplaces, and schools, where detection of risky use is important, interventions are typically brief, and referral is likely.

#### 3.1 What is screening?

A screen is a brief method for determining whether a particular disorder(s) (such as substance use or a mental health condition such as depression) may be present. Screening is a process for identification of a possible problem and does not necessarily catch the presence of a disorder, nor does it make assumptions about the role of cannabis use in a client's life. Screening can be done easily in clinical practice and may open a gateway to clinical care. A positive screen will usually trigger a more detailed assessment of the condition.

Screening is not assessment Assessment is not diagnosis Diagnosis is not formulation Formulation is not treatment

Lee et al. (2007)

#### 3.2 Rationale

Routine screening for cannabis use is important for many reasons:

- cannabis users may seek assistance for other problems, such as poor sleep, anger, depression, anxiety, relationship issues, or respiratory problems, and not mention that they use cannabis
- early detection of cannabis-related issues is important in preventing escalating problems
- 3. only a small minority of cannabis users actively seek some form of intervention to address their cannabis use. Although many cannabis users have only minor problems with cannabis, a significant proportion do experience significant dependence and related harms that affect them and others, but still do not seek treatment

4. cannabis use is very common in the community, especially among 15- to 30-year-olds and individuals using other illicit substances, with mental health conditions. Those presenting with new persistent respiratory conditions such as a wheeze or cough should be screened for cannabis use as a contributing factor

### 3.3 Who to conduct screening for cannabis and when

Due to the widespread use of cannabis in the community, the guiding principle is that all people in health settings should be screened for cannabis use. Your setting will guide the comprehensiveness of your screening and assessment procedures, as set out in Table 5.

Table 5: Opportunities for screening

Health Professional	Opportunities for cannabis screening
GP	Any routine check-up consultation or consultation related to smoking, respiratory, mental health, injury, reproductive health, accident, or sleep
Community health services	Any generalist counselling services, especially those serving young people
Mental health workers	All comprehensive assessments should include a general drug screen, especially those involving psychosis
Hospital workers	Presentations that include mental health, injury, or respiratory issues, especially in people aged 15 to 40

#### 3.4 How to introduce screening to the client

Letting clients know why and how you will be screening for cannabis will assist in providing a non-threatening context. In any setting, it is important to assure clients that what they tell you will remain confidential and that you will use the information for the purposes of treatment planning only. Be sure to discuss the limitations of confidentiality relevant to your service (including suicide risk and ethical obligations). In a setting that does not specialise in alcohol and other drug treatment, such as a GP surgery or on a hospital ward, it is important to introduce screening in a non-threatening manner. For example:

"I am now going to ask you some routine lifestyle questions. Is that o.k.? [collaborative approach]

O.k., first off, do you use alcohol or tobacco [If yes, how much]? Have you used any other substances [If yes, quantify and probe using specific drug names]?"

If you introduce standardised questionnaires, it is important to discuss their relevance to the assessment procedure. You should explain the purpose of each instrument, what the results will be used for, who will have access to them, and how long they take to complete. In addition, you should ask for permission to administer the forms after providing them with the above information. All of the tools to be recommended are brief and can be scored in session and the results incorporated into your feedback to the client immediately.

#### 3.5 Types of screening

Screening can be standardised or non-standardised, and questions can be open-ended or closed. Most screening tools utilise closed questions. We suggest that after introducing screening to the client as suggested in 3.4, clinicians start the screening by asking one general, open-ended question about cannabis use as suggested in Table 6.

Table 6: Examples of open-ended and closed questions you can use

Closed-ended questions	Open-ended questions
How old were you when you first smoked cannabis?	Tell me about your early experiences with cannabis?
How often do you use cannabis?	How has your cannabis use changed over time?
How old were you when you began using it daily?	Describe some of your recent experiences with cannabis.
When did you first think you had a cannabis problem?	Can you tell me about some of the less positive things you might experience when using cannabis?

Adapted from Steinberg et al. (2005)

#### 3.6 Standardised screening tools

Psychometric tools are often used as an adjunct to clinical assessment (see Table 7). The Cannabis Severity of Dependence Scale has a strong evidence base for use in screening; the other measures reported below have a developing evidence base. Please note that the table is not a full list of available instruments and that the tools mentioned are not diagnostic.

Table 7: Screening tools

Tool	Number of items	Description	Psychometric properties
Cannabis Severity of Dependence Scale (SDS) (Gossop et al., 1995)	5	<ul> <li>valid</li> <li>reliable</li> <li>tested with adolescents, adults, and psychiatric populations</li> <li>separate norms available for adults and adolescents</li> </ul>	• sensitivity 64–86%, specificity 82–94% in adults (Swift, Copeland & Hall, 1998); and sensitivity 64% and specificity 94% (cut-off 4) in non-clinical young people (Martin et al., 2006)
Cannabis Use Disorders Identification Test (Adamson & Sellman, 2003)	10	<ul><li>self-report for adults</li><li>cut-off norms available</li></ul>	<ul><li>sensitivity 73%; specificity 95%</li><li>overall positive predictive validity 84%</li></ul>
Cannabis Use Problems Identification Test (Bashford, 2007)	16	<ul> <li>cannabis-specific tool that can identify and predict problems in adolescents and adults</li> </ul>	<ul><li>sensitivity 98%; specificity 35%</li><li>overall positive predictive validity 95%</li></ul>
Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) (WHO ASSIST Working Group, 2002)	8	<ul> <li>general alcohol and other drug screen (including cannabis)</li> <li>clinician-administered; includes feedback</li> </ul>	• 91% sensitivity, 90% specificity (Humeniuk et al., 2008)
Problem Oriented Screening Instrument for Teens (POSIT) (short form) (Knight, 2001; Danseco & Marques, 2002)	11	<ul> <li>identifies adolescents in need of further drug-abuse assessment</li> </ul>	<ul> <li>accuracy of 84%, with sensitivity and specificity ratios of 95% and 79% respectively (Latimer, Winters &amp; Stinchfield, 1997)</li> </ul>

After administrating the screening tools, it is important to give individualised feedback about the results. It is at that point that you may encounter some resistance from clients. The following illustrates some examples of client responses and how you might respond in a Motivational Interviewing style (See Chapter 6 for more information on this approach).

"Client: Smoking cannabis is not a problem for me."

"Clinician: You don't believe you need to reduce your use right now (reflect back). You feel that you have control of your use."

"Client: Cannabis is not as bad as other drugs."

"Clinician: You don't think that cannabis use is as bad as other drugs (reflect back). Can you tell me why you think it's less risky for you than using other drugs?"

"Client: My friends all smoke more than I do."

"Clinician: So it sounds like you believe that because your friends smoke more than you, you don't have a problem with cannabis. Does that sound right?"

"Client: Cannabis is not addictive."

"Clinician: Yes it true that not everyone who uses cannabis gets addicted. Let's look at the answers from the screening and see whether it fits for you."

### 3.7 Biochemical markers for screening and assessment

In some settings, the testing of urine, blood, hair, and oral fluid samples for a drug or drug metabolites is acceptable for assessing drug use. Biological markers should guide the nature of further assessment options. For example, if a patient screens positive for a drug, then tools such as the Severity Dependence Scale (SDS) (Gossop et al., 1995) may be satisfactory to determine the severity of use. Biochemical markers also can be used to validate self-reports.

There are two types of biochemical testing procedures: screening and confirmation.

#### A. Screening

Screening tests (e.g. urine dipstick tests) tend to be very specific, but can lack sensitivity. Specificity refers to the ability to give a negative result in someone who has not used a particular drug recently. Sensitivity, on the other hand, refers to the ability to give a positive result in someone who has used it recently.

#### **B.** Confirmation testing

Confirmation of a positive screening result involves the use of a second and more rigorous detection method that is usually done in a laboratory. The most common method used for confirmation procedures is gas chromatography or mass spectrometry.

#### Rationale for biochemical testing

- it provides an objective measure of substance abuse or relapse on which to base clinical decisions and treatment planning
- it may be a medico-legal requirement
- laboratory services that provide "emit assays" can quantify the cannabinoids, but what these quantities represent can be very difficult to interpret and should not be used without having an expert provide the range of alternative possible interpretations. This can be helpful in client feedback of falling cannabinoid levels; measurement of treatment outcomes; and research studies. It should be noted that results of these laboratory tests may not be available for some days or weeks after the sample is taken and that the tests may incur extra costs
- dipstick tests provide immediate confirmation of drug use, but cannot establish whether a patient has only used recently or has a chronic problem. That is, dipstick tests cannot assess whether cannabis has been used in the last 24 hours, how many times cannabis has been used, or how much cannabis was consumed
- a less intrusive method may be appropriate.
   Saliva-testing kits are increasingly used in a
   variety of settings. Release of THC from blood
   back into saliva is idiosyncratic, however, and
   saliva testing often cannot distinguish immediate
   past use from use a day or more earlier; so THC
   detection using current saliva-testing devices also
   has limitations that necessitate good knowledge
   of alternative interpretations

#### Clinical issues when using biochemical screening

If you are considering the use of biological markers you should bear in mind the following points:

- How relevant is objective information for feedback and treatment planning?
- How important in relation to the possible negative effect on the therapeutic alliance if the client declines or is found to be under-estimating cannabis use?
- the cost of testing. Costs can be prohibitive for some individuals or services and may be an impediment to treatment if the client is required to hear it
- all the options. Select the test from the available options according to appropriateness, price point, availability, and intrusiveness

 setting. In a medico-legal; contingencymanagement; or middle- or long-term residential treatment setting, test results may be used to increase privileges or to offer advancement in the program

Please note that if a client requires a urine drug screen for criminal justice or medico-legal purposes, the relevant chain of custody requirements needs to be maintained.

#### Sample collection

The method of collecting a urine sample for drug screening is important. Techniques include measuring the temperature or pH of the sample immediately after it is procured, and using tamper-proof containers. Supervised specimen collection may need to be conducted to ensure that it is the urine of the person being screened.

#### **Detection times**

The window for detection of cannabis following the last occasion of use is subject to debate (Cary, 2006). Detection rates are influenced by technical variations (e.g. differing testing methods and test sensitivities), pharmacological variables (duration of use, metabolism, route of administration), and large individual differences in metabolism.

Table 8: Cannabis detection times

Amount	In urine*	In oral fluid
Single use	3-4 days (5ong/ml) 7 days (2ong/ml)	4–14 hours
Oral ingestion	1–5 days	Unknown
Daily use/ chronic use	10-36 days	4-30 hours

<sup>\*</sup>Dyer, Wilkinson & Wilkinson, (2008); Cary, (2006)

NB: Individual variation and variation in sampling method can significantly influence the detection time.

#### 3.8 Summary

Recommendation	Evidence
Screening for cannabis consumption should be routinely undertaken across a range of health settings, including alcohol and drug; mental health; emergency department; and general practice	A
A positive screening is a trigger for further assessment	Α
There are few clinically reliable and valid tools suitable for cannabis screening. Of those listed in Table 7, only the SDS and ASSIST are of Grade B evidence reliability. The remainder are of Grade C reliability	B & C

#### 3.9 References

Adamson, J.D. & Sellman, J.D. (2003). A prototype screening instrument for cannabis use disorder: The Cannabis Use Disorders Identification Test (CUDIT) in an alcohol -dependent clinical sample. *Drug and Alcohol Review* 22(3), 309–315.

**Bashford, J.L.** (2007). The Cannabis Use Problems Identification Test (CUPIT): Development and psychometrics. Unpublished doctoral thesis. Palmerston North, New Zealand: Massey University.

Cary, P. (2006). The marijuana detection window:
Determining the length of time cannabinoids will
remain detectable in urine following smoking: A critical
review of relevant research and cannabinoid detection
guidance for drug courts. *National Drug Court Institute IV*(2). Available on line: <a href="http://www.ndci.org/publications/">http://www.ndci.org/publications/</a>
THC \_Detection\_Window\_Fact\_Sheet.final.pdf

Danseco, E.R. & Marques, P.R. (2002). Development and validation of a POSIT-short form: Screening for problem behaviors among adolescents at risk for substance use. *Journal of Child and Adolescent Substance Abuse* 11(3), 17–36.

**Dyer, K., Wilkinson, X. & Wilkinson, C.** (2008). The detection of illicit drugs in oral fluid: Another potential strategy to reduce illicit drug-related harm. *Drug and Alcohol Review 27*, 99–107.

Gossop, M., Darke, S., Griffiths, P., Hando, J., Powis, B., Hall, W., & Strang, J. (1995). The Severity of Dependence Scale (SDS): Psychometric properties of the SDS in English and Australian samples of heroin, cocaine and amphetamine users. *Addiction 90*, 607–614.

Humeniuk, R., Ali, R., Babor, T.F., Farrell, M., Formigoni, M.L., Jittiwutikarn, J., de Lacerda, R.B., Ling, W., Marsden, J., Monteiro, M., Nhiwatiwa, S., Pal, H., Poznyak, V., & Simon, S. (2008). Validation

of the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST). *Addiction* 103(6), 1039–1047.

**Knight, J.R.** (2001). Reliability of the Problem Oriented Screening Instrument for Teenagers (POSIT) in adolescent medical practice. *Journal of Adolescent Health* 29(2), 125–130.

Latimer, W.W., Winters, K.C. & Stinchfield, R.D. (1997). Screening for drug abuse among adolescents in clinical and correctional settings using the Problem-Oriented Screening Instrument for Teenagers. *American Journal of Drug and Alcohol Abuse* 23(1), 79–98.

Lee, N., Jenner, L., Kay-Lambkin, F., Hall, K., Dann, F., Roeg, S., Hunt, S., Dingle, G., Baker, A., Hides, L., & Ritter, A. (2007). *PsyCheck: Responding to mental health issues within alcohol and drug treatment*. Canberra, ACT: Commonwealth of Australia.

Martin, G., Copeland, J., Gates, P., & Gilmour, S. (2006). The Severity of Dependence Scale (SDS) in an adolescent population of cannabis users: Reliability, validity and diagnostic cut-off. *Drug and Alcohol Dependence* 83, 90–93.

Steinberg, K.L., Roffman, R.A., Carroll, K.M., Mcree, B., Babor, T.F., Miller, M., Kadden, R., Duresky, D., & Stephens, R. (2005). *Brief counselling for marijuana dependence: A manual for treating adults*. DHHS publication no. [SMA] 05-4022. Rockville, MD: Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration.

**Swift, W., Copeland, J. & Hall, W.** (1998). Choosing a diagnostic cut-off for cannabis dependence. *Addiction* 93, 1681–1692.

WHO ASSIST Working Group. (2002). The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST): Development, reliability and feasibility. *Addiction* 97(9), 1183–1194.

### chapter 4: assessment

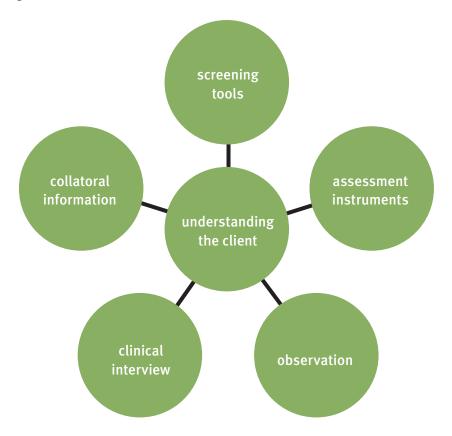
#### 4.1 Overview

Conducting a comprehensive assessment is an essential requirement of determining the most appropriate and potentially effective treatment intervention for the client (see Figure 1). In addition, comprehensive assessment provides information through which to monitor treatment progress because it is done both at the beginning of treatment and throughout.

Health professionals experienced in health and social assessment should assess cannabis use and related problems as part of a larger assessment of a client's psychosocial health functioning. In order to increase a client's understanding of the purpose of assessment,

health professionals should provide clients with information about the details of the assessment, how its results can be used to make appropriate referrals, and how they can be used to track the efficacy of the treatment services provided to the client.

Figure 1: Collecting information on clients



#### 4.2 Rationale

Early detection of, and intervention in, cannabisrelated problems is an effective public-health strategy. It also increases the likelihood that an individual will benefit from a brief intervention and reduce the longterm harms associated with cannabis dependence.

#### 4.3 Assessment as an engagement strategy

Difficulties engaging cannabis users are sometimes cited as a barrier to treatment. Assessment of readiness for treatment and monitoring the level of engagement, therefore, are particularly important. A growing evidence base suggests that a strong, positive relationship exists between treatment adherence and treatment outcome (Zweben & Zuckoff, 2002). Zweben and colleagues believe that readiness for change can be assessed by looking at problem acceptance (i.e.

whether the change is needed, wanted, and within reach) and treatment acceptance (i.e. whether the client agrees with the pathway offered).

Once cannabis users have presented for an initial appointment, whether or not they perceive it to be related to cannabis, the challenge for the practitioner is to engage them in treatment. Even when directly seeking assistance for cannabis-related problems, clients may come to a consultation with a degree of reluctance and some anxiety about the possibility of being judged. This increases the likelihood that they will be prepared to defend any impending threat to one of their most useful coping tools – cannabis. The assessment process in itself is an opportunity to engage and build rapport with clients. One technique for developing rapport is using open-ended questions to explore their concerns and goals. The subject of

cannabis and drug use should be introduced as a natural and routine part of discussion. For example:

"Tell me about your use of cannabis."

"What do you enjoy about cannabis?"

"Do you have any concerns about your use of cannabis?"

"Where do you see your cannabis use fitting in here?"

### 4.4 Comprehensive drug use assessment (60–120 mins)

Assessment for cannabis problems may take place on just a single occasion and be relatively brief. A comprehensive and continuing assessment process may, however, provide opportunities for clinicians to non-judgementally provide, and for clients to seek, information useful in assisting clients to make changes in their cannabis use (Beich, Thorsen & Rollnick, 2003). An individual's pre-existing strengths, deficits, and goals, as well as the effect of cannabis on his or her life, need to be considered in formulating a treatment plan (Beich, Thorson & Rollnick, 2003). A comprehensive assessment therefore necessitates careful attention in several domains.

#### 4.5 Domains of assessment

Core elements of any assessment of cannabis users should cover their broad range of problems beyond cannabis abuse or dependence as well as factors predisposing to, precipitating, or maintaining its use. The extent to which you explore each of these areas will depend upon their relevance for your client and the setting in which you work.

#### Systematic assessments should include:

pattern of recent history of cannabis and other drug use mental health history

psychosocial issues

treatment goals

motivation to change

### Pattern and recent history of cannabis and other drug use

- quantity, frequency, and pattern of cannabis use over time (recorded as grams or number of cones or joints used daily/weekly)
- duration of current pattern, and changes in pattern over time
- indicators of severity of dependence, withdrawal symptoms, significant periods of abstinence, and situations of/triggers for use

- identification of established or probable DSM-IV-TR and/or ICD-10 cannabis-related diagnoses
- other substance use issues (i.e. full drug history, typical/current patterns of other drug use), as well as ascertaining which drug is currently causing the most dysfunction (noting that this may not be relevant or possible to identify if clients engage in varying patterns of multiple drug use or if substitution is common)
- past treatment, exploring experiences and outcome
- biological markers
- the five Ps: presenting issues, predisposing factors, precipitating factors, perpetuating factors, and protective factors

#### Examples of cannabis-history questions

"When did you last you use cannabis?"

"Have there been any recent changes in the way you use?"

"Have you ever tried to cut down or stop your cannabis use?"

"Do you normally smoke with others? (If yes, ask, "Are they friends, family members, your partner?")

"Are you worried about your cannabis use?"

#### Mental health history

- previous psychiatric/mental disorders, including established or probable DSM-IV-TR and/or ICD-10 diagnoses
- related admissions or treatment
- medications
- known family history of mental disorders
- current mental status (see mental status examination)
- current and past suicidality risk

#### Psychosocial issues

- collateral information from carers/family members/friends where possible
- indicators of problems directly or indirectly related to cannabis use (e.g. relationship issues; physical, financial, or cognitive problems; legal problems; absenteeism from work/school)
- cognitive screening (memory, reading skill/ability to participate in CBT)
- domestic violence screen (mandatory in some settings)
- client's strengths and positive coping strategies and past successes
- current social situation and supports

- forensic history (details of offences, charges, convictions, and sentences passed)
- background information (family, marital status, legal involvement, health, education, and financial, employment, and housing status)

Note: The Cannabis Problems Questionnaire can help raise awareness of psychosocial issues resulting from cannabis use (see Chapter 11).

#### Treatment goals

- cannabis-specific treatment goals (abstinence or reduction in levels of use)
- additional treatment goals (e.g. mood management, vocational, relationship)

Tip It is important to assess mental health symptoms on a regular basis, as cannabis use may mask underlying conditions that may initially worsen or remit following cessation

#### Motivation to change

Despite the negative sequelae of cannabis use, many users are reluctant or ambivalent about change and may come for treatment through coercion by others (families, partner, courts). For this reason, it is important to explore individuals' internal and external motivation to change their cannabis use; barriers to change, such as the success of previous quit attempts; the pros and cons of changing; and behavioural changes (Miller & Rollnick, 1991).

#### Ways to assess internal factors

"What do you want to change?

"What are the most important changes you've been looking forward to after cut-down/quitting?

"Based on a scale of o to 10, how much do you want to change at this moment?

"Are your concerns about the health consequences related to cannabis motivating you to change?

"Are your concerns about your relationship with someone important to you motivating you to change?

#### Ways to assess external factors

"Have there been recent happenings that led you here for a change?

"Who in your life (e.g. family, spouse, significant others, close friend) expects or wants you to change your use?"

"Do you come here for a change because of a legal order?"

"Will there be any negative consequences if you don't change?"

#### Previous quit attempts

Nature, number of attempts, longest abstinence period, reason for recent lapses.

"Have you ever attempted quitting? If yes, where and how?"

"Which attempt(s) were successful/unsuccessful?"

"If you look back, what have you done (what did you try) to make the attempt(s) successful/unsuccessful?"

"Can you tell me about what you have received from others that felt extremely supportive to you?"

"What was your longest abstinence period? How did you keep it up so long?"

"Can you tell me about the situations that led to relapse?"

"What were your inner conversations/how did you feel right before and right after the relapse?"

"(Rating) based on a scale of o to 10, how much confidence do you have in succeeding in the current attempt?"

#### Behavioural changes gained

Consider what the individual has done to change his or her cannabis use already. In addition, address what he or she plans to do in the future. Importantly, recognise and validate his or her achievements to date.

"Since the time when you decided to change, what action(s) have you taken to change (e.g. avoiding highrisk situations, staying away from drug-using friends, restriction on spending, etc.)?"

"What further actions are you going to take to continue to change your behaviour?"

Assessing 'stages of change' as described by Prochaska and DiClemente (1983) can be achieved through activities such as the contemplation ladder or by the therapist's working through the series of tasks set out in the table below.

Stage of change	Therapist tasks
Pre-contemplation	<ul> <li>identify "the problem"</li> <li>be aware of difference between reason and rationalization</li> <li>use MI strategies to raise awareness and doubt</li> <li>increase the client's perception of risks and problems with current behaviour</li> <li>remember that the goal is not to make precontemplators change immediately, but to help move them to contemplation</li> </ul>
Contemplation	<ul> <li>consider the good and the not-so-good (from the client's perspective) of the problem behaviour, as well as the good and the not-so-good of change</li> <li>gather information about past change attempts. Frame these in terms of "some success" rather than "change failures"</li> <li>explore options the client has considered for the change process, and offer additional options where indicated and if the client is interested. Remember that our clients are rarely novices to the change process</li> <li>elicit change statements</li> </ul>
Preparation	Ask key questions designed to evoke a change plan:  what do you think you will do?  what's the next step?  it sounds like things can't stay as they are now  what are you going to do?  Assist client in building an action plan and removing barriers
Action	Help increase client's self-efficacy:  • focusing on successful past attempts  • highlight successful changes already made  • reaffirming commitment  • offer successful models with a menu of options  • therapist acts as monitor of change
Maintenance	<ul> <li>explore the factors precipitating and maintaining the crisis</li> <li>provide information</li> <li>give feedback about progress</li> <li>have empathy for clients</li> <li>communicate possibility of future support</li> </ul>

#### Assessing motivation on a contemplation ladder

Based on the "stages of change" of Miller and Rollnick (1991), the Contemplation Ladder (Biener & Abrams, 1991) is a scale depicted as a ladder with the higher rungs representing greater motivation to change. The "Marijuana Ladder" developed by Slavet et al., (2006) for incarcerated young people has been associated with increased engagement with adolescents (See Chapter 12).

### Assessing motivation through formalised questionnaires

Motivation to change can also be assessed using validated tools, including:

- importance of change (Miller & Johnson, 2008; Rollnick, 1998)
- confidence to change (Miller & Johnson, 2008; Rollnick, 1998)
- readiness to change (Miller & Johnson, 2008; Rollnick, 1998)
- decisional balancing (Miller & Rollnick, 2002)
- motivations for using substances amongst psychotic patients (Spencer, Castle & Michie, 2002)

#### management of cannabis use disorder and related issues

#### 4.6 Adjunctive measures

Assessment may be guided by the validated structured clinical interviews and self-reports. Table 9 provides details of adjunctive assessment tools that are supported by a minimum level of evidence and available in the public domain.

#### Table 9: Assessment options

Area	Tool	Items	Notes
Cannabis diagnosis Tobacco dependence diagnosis	DSM-IV-TR (APA, 2000) CIDI (Kessler et al., 1998) SCID (First et al., 1997) SCAN (Wing et al., 1990) GAIN (Dennis et al., 2002) Fagerström Nicotine Dependence Scale (Heatherton et al., 1991)	6 items	All tools are in a structured interview format and can provide differential diagnosis  Identification and severity of nicotine dependence
Severity	Severity of Dependence Scale (Gossop et al., 1992)	5 items	Assesses severity of dependence
Consumption	Timeline Followback (Sobell & Sobell, 1996)	_	Can be used to assess cannabis use during the past year, but we suggest limiting assessment to the past 30 days to lessen client burden
Psychosocial issues	Cannabis Problems Questionnaires (CPQ for adults (Copeland et al., 2005) and adolescents Martin et al., 2006)	22 (adult) 27 (core)	Assesses a range of physical and psychosocial consequences of cannabis use
Withdrawal symptoms	Marijuana Withdrawal Checklist (Budney, Novy & Hughes, 1999)	15	Assesses severity of withdrawal symptoms
Cognitive functioning	Adult/Youth Self Report (Achenbach & Edelbrock, 1987) Mental Status Examination (Trzepacz & Baker, 1993)	126 items 10 domains	Assesses cognitions  Structured way of observing and describing a patient's current state of mind
Readiness to change	"Readiness to Change" Scale (Rollnick et al., 1992)	12	Designed for use in medical settings
Mental health symptoms	Depression Anxiety and Stress Scale (DASS) (Lovibond & Lovibond, 1995) K10 (Kessler et al., 2002)	42 (mini version 21) questions 10 items	Rates severity of symptoms of depression, anxiety and stress  Scale of psychological distress

#### 4.7 Continuing assessment

As with other substance use disorders, clients may replace cannabis with other drugs, such as alcohol. It is important, therefore, to monitor other drug use for escalation and/or substitution when reducing the drug of primary concern. Such monitoring can assist clinicians in deciding whether patients need their care to be stepped up or down.

#### 4.8 Post-assessment feedback

Providing the assessment results to the patient can assist with increasing patients' knowledge about the harms associated with their cannabis use and with increasing their motivation to change. Recent evidence suggests that structured feedback can bring about significant change in use by some individuals, even without providing more intensive intervention (Wild et al., 2007; Doumas & Hannah, 2008).

Feedback should entail a summary of the client's drug use and related problems as reported in the assessment. Clinicians are encouraged to couch this information in comparison with levels of use and problems evidenced in the general population and in treatment-seeking cannabis users. At all times, clinicians will want to deliver the feedback in an understandable, objective, culturally sensitive, and collaborative manner. It should be noted that many of the tools discussed in this manual have not been validated in culturally diverse groups and may not be appropriate for use in some groups. As always, clinical judgement should determine how much feedback the clinician should deliver and at what time.

In summary, clinicians need to deliver accurate feedback in an empathic, non-judgemental, and non-threatening manner. Such a context will allow patients to envision the benefits of changing and will increase their motivation for change. After feedback is presented, clinicians should allow clients to develop their own treatment goals. Such a process leads to a collaborative atmosphere, which is more likely to engender change than a coercive environment. Clinicians should aim to empower clients to sustain the changes they have decided to make.

#### How do I feedback dependent use?

"The level of cannabis use you report and the problems you describe, such as missing work, poor sleep, and difficulty not using, suggest that you may be dependent on cannabis. How does that fit with your view of your use?"

#### 4.9 Summary

- where possible, conduct a comprehensive assessment in parallel with building rapport
- provide feedback from assessment, with the goal of increasing insight that cannabis use needs attention
- continue to revise and monitor information throughout the different stages of treatment

Recommendations	Evidence
A thorough assessment may include a clinical interview as well as structured questionnaires, e.g. SDS, TLFB. Tools such as the MWC do not meet level A evidence	A & B
Key topics of assessment include patterns of drug use; psychosocial functioning; general health; mental symptomatology; readiness to change; and treatment goals	А
Routine assessment of commonly experienced mental health symptoms (e.g. depression, anxiety, and psychotic symptoms) should occur at assessment and be repeated regularly	А
Where possible, and with the client's permission, information from other family members/carers should be used	С

#### 4.10 References

Achenbach, T.M. & Edelbrock, C.S. (1991). Manual for the Youth Self-Report and 1991 profile. Burlington, VT: University of Vermont, Department of Psychiatry.

American Psychiatric Association (APA). (2000). Diagnostic and statistical manual of mental disorders, fourth edition (DSM-IV-TR). Arlington, VA: APA.

**Beich, A., Thorsen, T. & Rollnick, S.** (2003). Screening in brief intervention trials targeting excessive drinkers in general practice: Systematic review and metaanalysis. *British Medical Journal 327*, 536–542.

**Biener, L. & Abrams, D.** (1991). The contemplation ladder: Validation of a measure of readiness to consider smoking cessation. *Health Psychology 10*, 360–365.

Budney, A.J., Novy, P. & Hughes, J.R. (1999). Marijuana withdrawal among adults seeking treatment for marijuana dependence. *Addiction* 94, 1311–1322.

Copeland, J., Gilmore, S., Gates, P., & Swift, W. (2005). The cannabis problems questionnaire: Factor structure, reliability and validity. *Drug and Alcohol Dependence* 80(3), 313–319.

Dennis, M., Babor, T.F., Roebuck, M.C., & Donaldson, J. (2002). Changing the focus: The case for recognizing and treating cannabis use disorders. *Addiction 97*, 4–15.

- **Doumas, D. & Hannah, E.** (2008). Preventing highrisk drinking in youth in the workplace: A web-based normative feedback program. *Journal of Substance Abuse Treatment* 34(3), 263–271.
- First, M., Spitzer, R., Gibbon, M., & Williams, J. (1997). Structured Clinical Interview for DSM-IV Axis I Disorders: Clinician version (SCID-I Administration Booklet). Washington, DC: American Psychiatric Press, Inc.
- Gossop, M., Griffiths, P., Powis, B., & Strang, J. (1992). Severity of dependence and route of administration of heroin, cocaine and amphetamines. *British Journal of Addiction* 87, 1527–1536.
- Heatherton, T.F., Kozlowski, L.T., Frecker, R.C., & Fagerström, K.O. (1991). The Fagerström Test for Nicotine Dependence: A revision of the Fagerström Tolerance Questionnaire. *British Journal of Addiction* 86, 1119–1112.
- Kessler, R.C., Andrews, G., Colpe, L.J., Hiripi, E., Mroczek, D.K., Normand, S.L.T., Walters, E.E., & Zaslavsky, A. (2002). Short screening scales to monitor population prevalences and trends in nonspecific psychological distress. *Psychological Medicine* 32(6), 959–976.
- Kessler, R.C., Andrews, G., Mroczek, D., Ustun, T.B., & Wittchen, H.U. (1998). The World Health Organization Composite International Diagnostic Interview Short Form (CIDI-SF). *International Journal of Methods in Psychiatric Research* 7(4), 171–185.
- **Lovibond, P.F. & Lovibond, S.H.** (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy 33*, 335–343.
- Martin, G., Copeland, J., Gates, P., & Gilmour, S. (2006). The Severity of Dependence Scale (SDS) in an adolescent population of cannabis users: Reliability, validity and diagnostic cut-off. *Drug and Alcohol Dependence* 83, 90–93.
- Miller, W.R. & Johnson, W.R. (2008). A natural language screening measure for motivation to change. *Addictive Behaviors* 33(9), 1177–1182.
- Miller, W.R. & Rollnick, S. (1991). Motivational interviewing: Preparing people to change addictive behavior. New York: Guilford Press.
- **Miller, W.R. & Rollnick, S.** (eds.) (2002). *Motivational interviewing: Preparing people for change*. New York: Guilford Press.

- **Prochaska, J.O. & DiClemente, C.C.** (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consultant and Clinical Psychology 51*, 390–395.
- Rollnick, S. (1998). Readiness, importance and confidence: Critical conditions of change in treatment. In W. Miller & N. Heather (eds.), *Treating Addictive Behaviors*, 2nd edn. London: Plenum Press, pp. 49–60.
- Rollnick, S., Heather, N., Gold, R., & Hall, W. (1992). Development of a short "readiness to change" questionnaire for use in brief, opportunistic interventions among excessive drinkers. *British Journal of Addiction 87*, 743–754.
- Slavet, J., Stein, L., Colby, S., Barnett, N., Monti, P., Golembeske, C., & Lebeau-Craven, R. (2006). The Marijuana Ladder: Measuring motivation to change marijuana use in incarcerated adolescents. *Drug and Alcohol Dependence* 83, 42–48.
- **Sobell, L.C. & Sobell, M.B.** (1996). *Timeline Followback user's guide: A calander method for assessing alcohol and drug use.* Toronto, Canada: Addiction Research Foundation.
- Spencer, C., Castle, D. & Michie, P.T. (2002). Motivations that maintain substance use among individuals with psychotic disorders. *Schizophrenia Bulletin* 28(2), 233–247.
- **Trzepacz, P.T. & Baker, R.W.** (1993). *The psychiatric mental status examination*. Oxford, U.K.: Oxford University Press.
- Wild, T., Cunningham, J. & Roberts, A. (2007). Controlled study of brief personalized assessment -feedback for drinkers interested in self-help. *Addiction* 102(2), 241–250.
- Wing, J.K., Babor, T., Brugha, T., Burke, J., Cooper, J.E., Giel, R., Jablensky, A., Regier, D., & Sartorius, N. (1990). SCAN: Schedules for Clinical Assessment in Neuropsychiatry. *Archives of General Psychiatry* 47, 589–593.
- **Zweben, A. & Zuckoff, A.** (2002). Motivational interviewing and treatment adherence. **In W.R. Miller & S. Rollnick** (eds.), *Motivational interviewing: Preparing people for change*, 2nd edn. New York: Guilford Press, pp 199–219.

# chapter 5: withdrawal management

#### 5.1 Cannabis withdrawal

As mentioned in chapter two, the most common withdrawal symptoms are irritability, anxiety/ nervousness, restlessness and sleep difficulties (including strange dreams), anger, and aggression. Symptoms typically emerge after one to three days of abstinence, peak between days two and six, and last from four to 14 days (Budney et al., 2003; Budney & Hughes, 2006).

#### 5.2 Assistance through withdrawal

Assisting clients with withdrawal symptoms can involve:

- providing verbal and written information about what to expect (see withdrawal handout). Please note that it is important to inform clients that they may not experience all (or any) symptoms and that the severity of any symptoms experienced depends on many factors;
- developing a coping plan;
- acknowledging clients' fears about withdrawal symptoms;
- arranging the appropriate level of support

#### 5.3 Other influences on withdrawal

Research has indicated that withdrawal symptoms adversely affect quit attempts because cannabis users report using cannabis and/or other drugs to relieve symptoms (Copersino et al., 2006). Some dependent clients may be unaware that they are using cannabis to relieve withdrawal symptoms. Clients often have a difficult time distinguishing relief from withdrawal symptoms from an increase in pleasure due to intoxication. Table 10 indicates the variables that may influence withdrawal.

### Table 10: Variables that may affect withdrawal severity

Psychiatric comorbidity, including personality disorder Dose: amount and potency of preparation consumed

Duration of use

Past experience of withdrawal: severe anxiety, panic attacks, sleeplessness

Past or current other substance use

 $\label{thm:conditional} \mbox{History of aggression or violence; other personality traits}$ 

Setting: outpatient withdrawal may be more severe than in-patient withdrawal

Context: voluntary vs involuntary

Support: professional, family, social

Population: more severe in treatment seekers

#### 5.4 Assessment of withdrawal symptoms

At present there is no validated measure of cannabis withdrawal. Researchers have relied upon the Marijuana Withdrawal Checklist (MWC) (Budney, Novy & Hughes, 1999) to assess cannabis withdrawal in both adolescents and adults. Multiple versions of the MWC have appeared in the literature; most recently a 15-item version has been used to capture the range of symptoms of most patients (Budney et al., 2008). To monitor withdrawal symptoms, clients can complete the MWC on a daily basis (See "Screening Tools" section). When possible, monitoring of withdrawal symptoms should commence at least one day before cessation, in order to obtain an accurate baseline value of the symptoms and behaviours associated with withdrawal. As most symptoms substantially remit within six days, a diary should be kept for at least seven days. As sleep-related problems may persist longer for some individuals, a diary may be continued for up to a month.

### 5.5 What is the most appropriate setting for withdrawal?

Withdrawal symptoms from cannabis can be safely managed in an outpatient setting, but some clients may request an in-patient or residential setting. The necessity for in-patient care needs to be assessed on an individual basis and to be guided by the client's history of previous quit attempts in the community; personal and family circumstances; and any mental or physical health considerations.

#### 5.6 Withdrawal from multiple drug use

We recommend that cannabis-using clients who present for treatment for alcohol or a substance use disorder other than cannabis reduce their cannabis use as they reduce the drug of primary concern. Evidence suggests, however, that you don't necessarily have to reduce cannabis use to have good outcomes for the drug of primary concern. Clients with severe alcohol dependence and/or psychiatric conditions are likely to need additional care.

What if cannabis isn't the only drug a client should give up first Best-practice referral procedures should be followed if a clinician feels that the client's other drug use warrants intervention (including medication)

Is tobacco withdrawal similar to cannabis withdrawal? Tobacco use with cannabis is very common, and many of the withdrawal symptoms are similar Assess whether the individual may be experiencing both cannabis and tobacco withdrawal during this period

#### Tobacco withdrawal symptoms

Cannabis smokers often smoke tobacco, either with their cannabis or separately. Clients whose tobacco smoking occurs only with their cannabis smoking should be made aware that they could be experiencing tobacco withdrawal as well as cannabis withdrawal during this period. Clinicians should monitor both withdrawals, and nicotine replacement therapy during this period should be discussed with heavy tobacco smokers who use tobacco in conjunction with cannabis only. (Table 11 gives the timing of typical nicotine withdrawal symptoms.) Tobacco reduction can also cause changes to the saliva, which may be managed by sipping tap water regularly.

Table 11: Symptoms, duration, and prevalence of nicotine withdrawal

Symptom	Duration	Incidence
Irritability/aggression	< 4 weeks	50%
Depression	< 4 weeks	60%
Restlessness	< 4 weeks	60%
Poor concentration	< 2 weeks	60%
Increased appetite	> 10 weeks	70%
Light-headedness	< 48 hours	10%
Night-time awakenings	< 1 week	25%
Constipation	> 4 weeks	17%
Mouth ulcers	> 4 weeks	40%
Urges to smoke	> 2 weeks	70%

Source: McEwan et al. (2006). For more information about pharmacotherapy options for nicotine withdrawal, see Table 15.

#### 5.7 Pharmacotherapy for cannabis withdrawal

A number of studies have examined pharmacotherapy for the management of cannabis withdrawal. Bupropion, divalproex, lofexidine, naltrexone, nefazadone, mirtazapine, lithium, and oral THC have been evaluated in laboratory studies, but only three studies examined their efficacy in treatment seekers.

A summary of the studies is found in Copeland & Swift (2009). As clinical trials of potential medications for the management of cannabis withdrawal are in their early stages, no recommendations can be made on effective pharmacotherapies.

#### 5.8 Gradual vs sudden cessation

There have been no studies to indicate whether gradual reduction of cannabis can reduce withdrawal symptoms or give clients a better success rate than abrupt cessation. The literature on alcohol and other drugs and clinical experience in the management of cannabis withdrawal suggests that a period of abstinence from cannabis benefits those with cannabis dependence and makes more likely their management of cannabis use in the long term. Clients wishing to reduce it gradually should do so having set a quit date for some time in the following two to three weeks.

#### 5.9 Symptom-focused approach to withdrawal

As cannabis withdrawal involves a range of symptoms and there are no medications available to reduce the severity of withdrawal symptoms over all, another approach is to consider medications that target individual symptoms. There is no direct evidence, however, for the symptom-focused treatment of withdrawal management. Accordingly, practitioners will have to assess the utility of symptomatic management on a case-by-case basis. For example, a practitioner may find it appropriate to prescribe a short course of sedative—hypnotic medication at a low dose for an individual who experiences significant trouble sleeping while reducing his or her cannabis use.

As some persons with cannabis dependence are vulnerable to developing dependence on other psychoactive drugs, it is recommended that a family member assist in distributing and/or monitoring the use of prescription medication whenever possible and that the typical regime be limited to a maximum of five days.

For an individual who also has signs and symptoms of an anxiety disorder, acute psychosis, mania, or agitated depression, assessment by a psychiatrist is recommended. Diagnosable psychiatric conditions may become apparent at the end of withdrawal, and appropriate longer-term medication regimes may be considered once the diagnosis has been clarified.

#### **CAUTION**

Prescription of a benzodiazepine is not recommended as a routine approach for people experiencing cannabis withdrawal. When considering medication options, consultation with specialist services is recommended. The course should be short-term and carefully monitored.

#### 5.10 Stepped care for withdrawal symptoms

As with other psychoactive drugs, physiological withdrawal alone from cannabis is not likely to lead to long-term behaviour change. Withdrawal should be part of a continuum of care. This incorporates case planning for post-treatment support. If external support services are appropriate, good referral procedures should be followed and a central case manager should coordinate referrals. Post-withdrawal planning can be done formally (post-treatment plans) or informally (leaving the door open for clients to return) depending on your agency's procedures.

#### 5.11 Psycho-education for withdrawal symptoms

As cannabis withdrawal research is in its early stages, few studies have examined the efficacy of psychosocial interventions for dealing with cannabis withdrawal. Based on the wider substance-abuse

literature, psychosocial interventions for cannabiswithdrawal management are well-supported. These interventions involve both providing clients with accurate information about the nature and course of withdrawal symptoms (see psycho-education worksheet) and helping clients to devise management strategies for potential symptoms. Self-management strategies that have a strong evidence base in the general substance-abuse literature include sleep hygiene, progressive muscle relaxation, meditation, exercise, and social support.

Clients should be encouraged to keep a diary throughout the withdrawal period of the symptoms they experience. Strategies for coping with them appear in Table 12. The diary can be reviewed during treatment sessions, and can assist patient and clinician in determining which strategies are more effective and demonstrate that the symptoms are rapidly diminishing. It is important to explain to clients that withdrawal symptoms can be very individual and that they may not experience all of them. At each session, it is important to review with the client those symptoms that have and those that have not remitted; management strategies used; and their effectiveness.

Table 12: Symptoms and recommended associated treatments

Withdrawal symptom	Suggested psychosocial interventions	Explanation of intervention
Sleep problems	Progressive muscle relaxation Imaginal relaxation	A relaxation technique designed to reduce the tension stored in the muscles. Particularly helpful for intrusive thoughts A guided approach that aims to create a safe and supportive space in the client's mind
Cravings	Urge surfing	A cognitive technique used to "ride out the (craving) waves"
Anger/irritation	Challenging irrational beliefs Physical activity Relaxation and coping strategies	A technique for challenging beliefs that lead to unhelpful behavioural patterns
Mood disturbances	Mood management  Coping strategies  Activity scheduling	Learning to effectively manage difficult emotions such as anger, depression, anxiety, and low self-esteem Strategies to alleviate or cope with stressful situations in which the risk of relapse is high Timetabling pleasant activities that give enjoyment and challenge negative perceptions

See worksheet section for examples of how to perform these interventions with clients.

#### **5.12 Summary**

Withdrawal symptoms are common in clients who use cannabis regularly. Whilst the withdrawal symptoms are generally mild, they can make achieving abstinence difficult. Monitoring of symptoms and communicating their role in the course of cannabis withdrawal can be useful interventions. As yet, there are no approved medications available to assist in the management of cannabis withdrawal.

Recommendation	Evidence
Regardless of agency setting, withdrawal symptoms should be considered in routine assessment	В
A range of psychosocial interventions should be considered before pharmacotherapy for the management of individual withdrawal symptoms	С
Monitoring of withdrawal symptoms and appropriate psycho-education can be helpful approaches to intervention	С
Whilst there is no current evidence to support the use of pharmacotherapy in ameliorating withdrawal symptoms, short-term use of appropriate medications for specific withdrawal-related symptoms may be considered	D

#### **5.13 References**

**Budney, A. & Hughes, J.** (2006). The cannabis withdrawal syndrome. *Current Opinions in Psychiatry* 19, 233–238.

Budney, A.J., Moore, B.A., Vandrey, R.G., & Hughes, J.R. (2003). The time course and significance of cannabis withdrawal. *Journal of Abnormal Psychology* 112(3), 393–402.

**Budney, A.J., Novy, P. & Hughes, J.R.** (1999). Marijuana withdrawal among adults seeking treatment for marijuana dependence. *Addiction* 94, 1311–1322.

Budney, A.J., Vandrey, R.G., Hughes, J.R., Thostenson, J.D., & Bursac, Z. (2008). Comparison of cannabis and tobacco withdrawal: Severity and contribution to relapse. *Journal of Substance Abuse Treatment* 35(4), 362–368.

**Copeland, J. & Swift, W.** (2009). Cannabis use disorder: Epidemiology and management. *International Review of Psychiatry* 21(2), 96–103.

Copersino, M.L., Boyd, S.J., Tashkin, D.P., Huestis, M.A., Heishman, S.J., Dermand, J.C., Simmons, M.S., & Gorelick, D.A. (2006). Cannabis withdrawal among non-treatment-seeking adult cannabis users. *American Journal on Addiction* 15(1), 8–14.

# McEwen, A., Hajek, P., McRobbie, H., & West, R. (2006). Manual of smoking cessation: A guide for counsellors and practitioners. London: Blackwell; 2005.

#### chapter 6: brief interventions

#### 6.1 Overview of brief interventions

Brief and early interventions aim to detect and intervene with clients who, regardless of whether they meet criteria for cannabis-use disorder, are experiencing problems as a result of their use and are at risk of developing long-term cannabis dependence. Early interventions are generally opportunistic and are appropriate for clients who have not specifically sought help for their cannabis use but whose use is detected as being risky. The goal of a brief intervention is to reduce the risk of harm from using cannabis. Whilst abstinence will achieve the greatest reduction in harm, not all clients are ready and motivated for it. Striving for and realising intermediate goals, such as decreasing use or using in less risky situations, will allow clients to achieve mastery. Mastery, in turn, can increase a client's motivation to work on goals more difficult to achieve, such as abstinence.

Brief interventions generally range from one to nine sessions and typically include the provision of self-help material, a brief assessment/screen, advice and information, assessment of motivation for change, problem solving, goal setting, relapse prevention, harm reduction, and follow-up care (Marsh, Dale & Willis, 2007). A number of large-scale trials in the United States and Australia (see Table 13) provide support for four behaviourally based interventions: Motivational Interviewing (MI), Motivational Enhancement Therapy (MET), Cognitive Behavioural Therapy (CBT), and Contingency Management (CM). The treatment that has received the most evidentiary support has been CM in combination with Cognitive Behavioural Therapy (Budney et al., 2006).

Given that the optimum number of sessions is unknown; this chapter provides two options for interventions. For the first, we provide information regarding a brief two-session intervention for clients who are experiencing relatively few problems with their cannabis use or who are not motivated to access more-intensive treatment services. For the second, we detail common components used in various cannabis evidence-based interventions so that you can add components to the basic two-session treatment on the basis of a client's needs. As most programs range from four to six sessions, we offer a six-week program that can be tailored to suit each client.

Table 13: Randomised trials of behavioural treatments (adults and young adults)

Author	N	Study design	Intervention	Outcome	Manual available
Stephens et al., 1994	212	Adults, two groups, 12-month follow-up	CBT vs social- support group (discussion intervention)	Both groups had significant reductions in cannabis use. No significant differences between groups in days of cannabis use, cannabis-related problems, or abstinence rates	N/A
Stephens et al., 2000	291	Adults, three groups, 12-month follow-up	14-session CBT group treatment vs 2-session MET vs delayed treatment control (DTC)	Both treatment groups showed greater improvement than DTC on most cannabisoutcome measures. No significant difference in outcomes between the two	N/A
Budney et al., 2006	60	Adults, three groups, no follow-up	4-session MET vs 14-session MET/CBT vs MET/ CBT and voucher incentives (MET/ CBT+V)	No significant differences in abstinence between MET and MET/CBT groups. MET/CBT+V had greater durations of abstinence and had more abstinent subjects at the end of treatment than the other two groups	No
Copeland et al., 2001	229	Adults, three groups, 6-month follow-up	6-session MET/CBT vs 1-session MET/ CBT vs DTC	Both treatment groups reported better outcomes (greater abstinence rates, fewer cannabis-use-related problems, less concern about cannabis use) than DTC	No
Sinha et al., 2003		Young adults on probation, two groups, 1-month follow-up	3-session MET vs 3-session MET and vouchers	Vouchers enhanced treatment attendance, did not affect cannabis use. Note that the voucher incentive was for attendance and not abstinence	N/A
Cannabis Treatment Research Project Group, 2004	450	Adults, three groups, multi-site, 12-month follow- up	9-session MET/CBT vs 2-session MET vs DTC	Both treatment groups showed greater improvement than DTC on most cannabis-outcome measures. The 9-session MET/CBT reduced cannabis use and associated consequences more than the 2-session MET did	Yes Steinberg et al., 2005
Budney et al., 2006	90	Adults, three groups, 12-month follow-up	14-session MET/ CBT vs MET/CBT and vouchers (MET/CBT+V) vs vouchers alone	No differences on abstinence initiation during treatment, between MET/CBT +V and vouchers alone, but both superior to MET/CBT alone. MET/CBT+V had superior post-treatment abstinence to that of vouchers alone or MET/CBT alone	No
Carroll et al., 2006	136	Young adults, four groups, 6-month follow-up	MET/CBT vs MET/CBT and vouchers (MET/ CBT+V) vs vouchers alone vs case management	Vouchers enhanced treatment retention and cannabis abstinence, with MET/CBT +V showing the best outcomes. MET/CBT enhanced self-reports of decreased cannabis use at the 6-month follow-up	N/A
Kadden et al., 2007	240	Adults, four groups, 12-month follow-up	MET/CBT vs MET/ CBT and vouchers (MET/CBT+V) vs individual drug counselling (DC) vs DC and voucher	Vouchers engendered superior abstinence outcomes. MET/CBT +V showed the highest rates of abstinence at later follow-ups	N/A
Dennis et al., 2002	600	Young people 15–16 years old	5-session MET/ CBT vs 12-session MET/CBT vs family support	All interventions demonstrated significant pre- to post-treatment effects over 12 months. No treatment was superior to another	Yes
Martin & Copeland, 2008	40	Young people 14–19 years old	2 session MET vs delayed treatment control	Intervention group showed significantly greater reductions in frequency of use and of dependence symptoms	Yes

### 6.2 Successful elements of brief interventions

Miller and Sanchez (1993) looked at a number of brief alcohol interventions and found that they have the following six effective components in common.

•	F. Feedback	provide feedback from your clinical assessment
•	R. Responsibility	emphasise the person's personal responsibility for their drug use and associated behaviour
•	A. Advice	provide clear, practical advice and self-help material
•	M. Menu	offer a range of behaviour- change and intervention options
•	E. Empathy	express non-judgmental empathy and support
•	<b>S.</b> Self-efficacy	stress one's belief in the person's capacity for change

The FRAMES intervention can be divided into two major phases:

- (1) building motivation for change, and
- (2) strengthening commitment to change (Miller & Rollnick, 1991)

Below is more information about the techniques showing the most promise. These techniques are effective in the wider substance-using area, and clinicians are commended to seek specific, substantial training in cognitive-behavioural strategies and motivational-enhancement techniques.

# 6.3 Motivational Interviewing

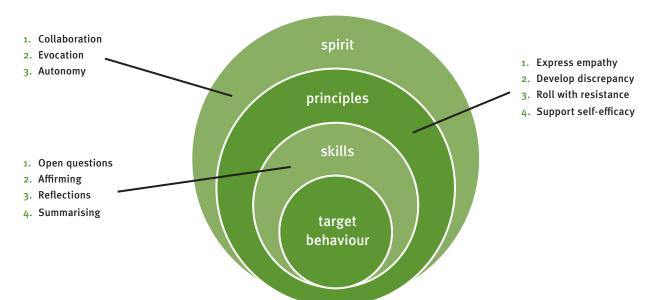
Motivational Interviewing (MI) is a clinical strategy designed to enhance client motivation for change. MI

can be incorporated into counselling, assessment, and brief interventions and aims to increase the client's awareness of the potential problems caused, consequences experienced, and risks faced as a result of a type of behaviour. The main goals are to establish rapport, elicit conversation related to change, and establish commitment language from the client. As this approach explores and resolves ambivalence within the client, it is appropriate for clients who are not voluntary treatment seekers (i.e. who are court-diverted) or who are contemplating change but not quite ready to move into the action phase. Ambivalence is accepted as normal.

MI is supported by more than 80 clinical randomised controlled trials (Hettema, Steele & Miller, 2005) in a range of target populations and behaviours, including substance use disorders, health promotion behaviours, medication adherence, and treatment of mental disorders.

- Miller and Rollnick (1991) identified characteristics
  of the clinician's style that embody the spirit of
  motivational interviewing, on the basis that they
  are more important than any particular technique.
  They identified the most important characteristic
  as being a collaborative approach, seeking to
  understand the person's point of view, particularly
  via reflective listening; summarising; and
  affirmation (see below)
- MI involves eliciting and selectively reinforcing the client's own self-motivational statements
- MI requires monitoring the client's degree of readiness to change and ensuring minimal resistance by matching their approach to the client's stage of change
- Mi promotes the client's autonomy

# MI framework



Miller and Rollnick (2002) have described four basic motivational principles underlying MI. These are to:

- 1. express empathy
- 2. develop discrepancy
- 3. roll with resistance
- 4. support self-efficacy

### 1. Express empathy

The MI clinician seeks to communicate great respect for the client. Communications that imply a superior-inferior relationship between clinician and client are avoided. The clinician's role is a blend of supportive companion and knowledgeable consultant. The client's freedom of choice and self-direction are respected. In this view, only the client can decide to change and carry out that choice. The clinician seeks ways to compliment and build the client, rather than to denigrate or to tear the client down. Much of MI is listening rather than telling. Persuasion is gentle, subtle, always with the assumption that change is up to the client. The power of such gentle, nonaggressive persuasion has been recognised widely in clinical writings, including Bill Wilson's own advice on "working with others" (Alcoholics Anonymous, 1976). Reflective listening (accurate empathy) is a key skill in motivational interviewing. It communicates an acceptance of clients as they are and supports them in the process of change.

### 2. Develop discrepancy

Motivation for change occurs when people perceive a discrepancy between where they are and where they want to be. This approach seeks to increase and focus the client's attention on such discrepancies with regard to drug use. In certain cases, in which the client is not actively engaged in thinking about change, it may be necessary to develop such discrepancy by raising the client's awareness of the adverse personal consequences of his or her drug use. Such information, when properly presented, can precipitate motivation for change. As a result, the individual may be more willing to enter into a frank discussion of change options, in order to reduce the perceived discrepancy and regain emotional equilibrium. In other cases, the client enters treatment in a later "contemplation" stage, and it takes less time and effort to move the client along to the point of determination to change.

#### 3. Roll with resistance

How the clinician handles client "resistance" is a crucial and defining characteristic of this approach. MI strategies do not meet resistance head-on, but rather "roll with" the momentum, with a goal of shifting client perceptions in the process. New ways of thinking about problems are invited, but are not imposed. Ambivalence is viewed as normal, not pathological, and is explored openly. Solutions are usually evoked from the client rather than provided by the clinician. This approach to dealing with resistance will be described in more detail later.

# 4. Support self-efficacy

A person who is persuaded that he or she has a serious problem will still not move toward change unless there is hope for success. Bandura (1982) has described self-efficacy as a critical determinant of behaviour change. Self-efficacy is, in essence, the belief that one can perform a particular behaviour or accomplish a particular task. In this case, the clients must be persuaded that they can change their drug use and thereby reduce related problems. In everyday language, this might be called hope or optimism, although it is not an overall optimistic nature that is crucial here but rather clients' specific belief that they can change their drug problem. Unless this element is present, a discrepancy crisis is likely to resolve into defensive coping (e.g. rationalisation, denial) to reduce discomfort, without changing behaviour. This is a natural and understandable protective process. If one has little hope that things could change, there is little reason to face the problem.

Further details can be found in Miller (1995).

Motivational Interviewing has been adapted into many brief-intervention approaches, of which the best known is Motivational Enhancement Therapy (MET), employed in PROJECT MATCH to address drinking (Project Match Research Group, 1993). MET is a time-limited four-session approach that provides normative-based feedback and uses Motivational Interviewing to explore client motivation to change in light of the feedback. This approach of including MI in assessment feedback has been adopted by many brief interventions with good success (Miller & Rollnick, 2002).

Examples of responses to clients using the above MI framework

"Client: I'm only here because the judge sent me."

"Clinician: So you were forced to come here. [reflecting back and no fighting]"

"Client: A good joint really relaxes me."

"Clinician: You notice that pot relaxes you in the moment. You've also noticed that you have had increased anxiety in the last 12 months, which is around the same time you started smoking more. [linking past and present and developing discrepancy]"

"Client: I wouldn't use if my parents weren't on my back all the time."

"Clinician: Your cannabis use isn't just the only issue for you. It sounds like there are some issues to work on with your parents. [rolling with resistance]"

# 6.4 Cognitive-behavioural therapy (CBT)

Cognitive—behavioural therapy (CBT) is an evidence-based therapy that works on the premise that cognitions and behaviours are often intrinsically linked. Drug use is many drug dependent clients' primary mechanism of coping with a range of situations, both negative (such as distressing ones) and positive (such as celebrations and rewards). The emphasis of skills training is to help clients to unlearn old habits and replace those with new, more functional skills. CBT allows clients to develop, under clinical supervision, new coping skills, or to re-establish old skills that have become neglected.

Substance-abuse disorders, like many psychological disorders, are believed to be partly the result of faulty or irrational thought processes that have their manifestation in dysfunctional behaviours (such as drug taking). Many such thoughts are automatic, habitual, and resistant to change. The development of techniques to change or challenge such thought processes, together with other cognitive and behavioural coping responses, can lead to a reduction in an individual's dependence on a drug. Thus, CBT is a skills-based approach, and works on helping clients to develop a range of therapeutic techniques for overcoming physiological dependence and habitual reliance on a drug as a coping mechanism. The approach is structured and goal-oriented, with "homework" tasks that require clients to develop specific skills in the context of their problem drug use by practising set exercises.

#### **Advantages**

The CBT approach is a relatively brief therapeutic intervention, especially when compared with some other psychological therapies. CBT for substanceabuse disorders can be effective with one to six sessions (Mattick & Jarvis, 1993). Furthermore, the specific skills or techniques used can be varied according to the needs of the individual client.

#### **Elements**

A successful therapeutic outcome with CBT entails several important elements. Critically, clients are instructed in the use of drug-related coping skills. These include:

- techniques for managing urges and cravings;
- recognising triggers of drug use; and
- developing personal strategies for either avoiding or dealing with such triggers, managing withdrawal symptoms, and learning relapseprevention strategies.
- techniques for managing negative affect;
- stress-management skills;
- assertiveness and communication skills; and
- relaxation skills

#### **Further information:**

Australian Association for Cognitive and Behaviour Therapy

www.aacbt.org/

The British Association for Behavioural and Cognitive Psychotherapies

www.babcp.com/

Association for Behavioral and Cognitive Therapies www.abct.org/dhome/

The European Association for Behavioural and Cognitive Therapies

www.eabct.com/

The Centre for Clinical Interventions www.cci.health.wa.gov.au/index.html/

The Psychological Self-Help (Mental Health Net) www.psychologicalselfhelp.org/

#### 6.5 Contingency management (CM)

CM involves the systematic use of positive and negative consequences (reward and punishment) following a target behaviour (Budney et al., 2001). In the case of treatments for cannabis dependence, two types of CM have been tested to date: abstinence-based and attendance-based vouchers. This incentive-

based intervention was adapted from a program developed for the treatment of cocaine dependence (Budney & Higgins, 1998). The abstinence-based voucher program provides tangible incentives contingent on cannabis abstinence documented via a once- or twice-weekly drug-testing program. Vouchers have a monetary value that escalates with each consecutive negative drug test. Earned vouchers can be exchanged for pro-social retail items or services that may serve as alternatives to cannabis use.

Of the five trials published looking at CM and cannabis use, all report positive effects on cannabis-use outcomes (Budney et al., 2006). CM, however, has not been evaluated outside experimental trial conditions. Despite the lack of effectiveness studies (i.e. realworld applications), clear and consistent evidence exists, throughout the substance-abuse literature, for the efficacy of abstinence-based incentive programs to engender high rates of initial and medium-term abstinence.

# **General information**

Contingency management considers drug use as operant behaviour, that is, behaviour that is maintained in part by the reinforcing biochemical effects of the abused substance and in part by reinforcing environmental influences (e.g. social reinforcement by peers). CM, in the form of vouchers, has been found to assist cannabis users to achieve extended periods of continuous cannabis abstinence during treatment (Petry & Simic, 2002). Contingency management seeks to provide alternative incentives contingent upon abstinence from a particular target drug. There are four primary methods of providing incentives:

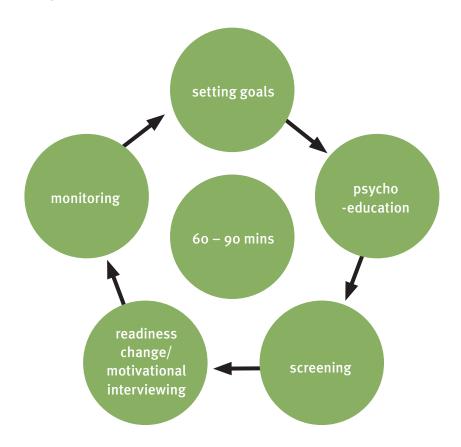
 voucher-based reinforcement: clients receive vouchers with various monetary values (usually increasing in value after successive periods of abstinence) for providing biological samples (usually urine) that are negative for the tested drugs. These vouchers are withheld when the biological sample indicates recent drug use.
 Once earned, vouchers are exchanged for goods or services that are compatible with a drug-free lifestyle

- prize-based reinforcement: participants receive a set number of draws, for example from a number of slips of paper kept in a fishbowl, for providing a negative biological specimen. Provision of a specimen indicating recent drug use results in the withholding of draws. Each draw has a chance of winning a "prize", the value of which varies. Typically, about half the draws say "good job!" and the other half result in receiving a prize of varying value
- privileges: participants receive privileges for providing a negative biological sample
- monetary incentives: there have been a few studies from America in the cannabis field that have assessed the use of monetary incentives. It appears that low-value (US\$3) incentives are as effective as higher-value (US\$20) ones

# If considering offering CM incentives, be aware that the following issues need to be agreed upon:

- the target behaviour (i.e., attendance or drug use)
- the type of reward (cash, voucher, or products)
- schedule (cumulative, behavioural)
- principles of application (consistency, agreement/ contract/tangible)
- program details (duration, objective, consequences [including magnitude], schedule of delivery, practical logistics of costs, acceptability, training considerations, etc.)
- whether there is sustainable funding

# 6.6 Outline of a single-session intervention



### Screening

- screening/assessment can be done with openended questions and/or formalised tools
- questionnaires/screens should be scored in session and fed back, taking into consideration the client's individual answers
- invite reflections by asking, "What do you make of this?"

# Psycho-education

 this includes reflecting back the harms associated with cannabis use that were raised by the client in his or her assessment. Provide the client with additional psycho-educational materials (see worksheets and booklets such as "Guide for Quitting", available from www.ncpic.org.au)

# Self-monitoring of cannabis use/withdrawal symptoms and/or mood

 if a client expresses motivation to modify cannabis use, encourage him or her to monitor changes for at least seven days. For clients with co-morbid mood disorders, a diary can incorporate cannabis use, withdrawal symptoms, and links with changes in mood state (see cannabis diary in worksheets section)

### Readiness to change

- if clients are ambivalent about changing their cannabis use, employ MI techniques to create a desire and resolution to commit to change
- complete the "pros and cons" sheet (see decision balance sheet in worksheets section)
- if the client is committed to change, set a quit date and discuss relapse prevention (see worksheet)
- if the client is not interested in modifying use at this time, offer educational material (see psychoeducation section) and negotiate a follow-up session

# Negotiate continuing treatment/referral or a follow-up session

- the length and intensity of an intervention should be discussed from the outset
- discussing the follow-up procedures of your agency is an important aspect of engagement
- suggested two- to six-session interventions can be found in the next section, but more experienced clinicians may prefer to pick and choose from the evidence base as set out in Table 14

#### 6.7 Two- to six-session interventions

In the absence of evidence for the optimum number of sessions and which components of treatment are most successful, elements that have been included in successful cannabis-treatment trials are detailed below. Experienced clinicians may choose to tailor these components to the client's needs based on the assessment or case formulation. This includes a negotiable number of sessions and the order you deliver the components in. There is no evidence to suggest which components may be more important than others.

Table 14: Components of evidenced-based interventions for cannabis

General	Behavioural	Cognitive
Self monitoring	Activity scheduling	Urge surfing/craving management
Goal setting	Indentifying coping strategies	Mood management/ cognitive awareness/ coping strategies
Problem- solving skills	Drug-refusal skills	Relapse prevention
Psycho- education	Mood management	Challenging irrational beliefs
	Sleep hygiene	Urge surfing/craving management

<sup>\*</sup>Note: client-based activities on all of these topics are located in the worksheet section

Alternatively clinicians may wish to follow the session outlines used in treatment trials. As an example, we have provided below the session outline from *A Brief Cognitive—Behavioural Intervention for Cannabis Dependence: Therapists' Treatment Manual* (Rees, Copeland & Swift, 1998). Other manuals are available for no cost (see Table 13).

#### session 1: assessment session

- setting the scene and introduction to motivational enhancement training
- explain privacy policy of the service, and outline of type of treatment the service provides
  - clients to attend all six sessions for best results
  - outline the rationale of CBT, i.e. CBT's provision of specific tools that will assist in making desired changes
  - outline the plan for therapy
- feedback from completed screening tools
  - feedback level of dependence (from SDS scale)
  - high-risk situations and triggers (from Cannabis Smoking Situations Scale)

- identify reasons for smoking and its pros and cons
- motivational-enhancement strategies
  - establish client's attitude and confidence to change and tailor your intervention to their stage of change
- setting goals
  - consider goals based on conversations about reasons for reducing/quitting
- · introduction to behavioural self-monitoring
  - explain that keeping tabs on smoking behaviour can help identify unhelpful patterns of thinking and behaviour

## session 2: planning to quit

- review of the week and homework exercise
  - check or complete homework
- review of personal triggers and high-risk situations
  - review urge and trigger diary and examine any patterns emerging
  - summarise triggers or cues
- introduction to coping with urges
  - establish strategies to overcome urges
  - understanding urges including their timelimited nature
  - urge surfing, non-reinforcement of urges, delay/distraction
- · planning to quit
  - setting a quit day (\*see 6.8)
  - information and discussion of withdrawal symptoms
  - examine social support systems (who, what, how)
  - dealing with slips or lapses
- optional section: drug refusal skills
  - practising making confident statements about having "given up"
- concluding: goals and homework

# session 3: managing withdrawal, and cognitive restructuring

- review of the previous week
  - review success of quit attempt
  - review high-risk situations and triggers
- reviewing withdrawal symptoms
  - review diary, and reinforce time-limited nature of symptoms
- cognitive restructuring: cognitive issues in quitting cannabis
  - outline ABC model
  - challenge automatic thoughts
  - discuss and challenge automatically arising expectations of the results of cannabis use
- ending the session

# session 4: review of cognitive strategies and skills enhancement

- review of previous week
  - review negative thoughts and automatic thoughts
- introduce seemingly irrelevant decisions
- development of personal skills
  - depending on client's need:
    - i) problem-solving skills (recognising problems and generating solutions)
    - ii) management of insomnia (principles of good sleep hygiene)
    - iii) progressive muscle relaxation

### session 5: reviewing and consolidating

- review of previous week
  - review overall progress and effectiveness of strategies
- coping-skills training
  - i) assertiveness skills/understanding of selfesteem
  - ii) communication skills
  - iii) stress/anger management
- concluding the session

# session 6: relapse prevention and lifestyle modification

- overview of previous week's homework
- relapse prevention
  - outline main ideas to be covered
  - discuss awareness of rationalisations
  - discuss the client's past relationship with cannabis
  - discuss feelings of loss or anxiety related to stopping cannabis
  - dealing with lapses/relapses
  - identifying personal rewards
- looking to the future
  - reviewing positive changes
- after the therapy has ended
  - identify post-treatment support

# 6.8 Setting a quit day

Clinical experience has also suggested that clients benefit from nominating a quit day (i.e., a day when they will cease to smoke cannabis). As not all users have abstinence as a goal, clinicians may need to tailor the quit date to a reduction date. Reduction dates allow users to cut down their use over time.

When trying to set a quit date, clinicians should discuss:

 client goals: as mentioned above, not all clients will be aiming for abstinence

- dependence severity: as recommended in the alcohol field, those more severely dependent are encouraged to spend some time away from cannabis
- self-efficacy for cannabis refusal: client confidence can be amplified by discussing past successes either in achievement of abstinence or change or in other endeavours that highlight their resources/ strengths
- employment/educational requirements and legal or parenting responsibilities: mandated orders may influence the need to quit or cut down and the time limits set by the client in which to achieve his or her goals

# 6.9 Summary

Recommendation	Evidence
Results from treatment trials have indicated that interventions using CBT/MET and CM are effective treatment for cannabis use	А
Clinicians should train in Motivational Interviewing techniques, in order to appropriately intervene with clients at different stages of readiness to change	A
As there is no evidence to guide the optimum number of sessions, clinicians should develop the skills to offer one to nine sessions, depending on clients' needs or goals and the agency setting	С

#### 6.10 References

Alcoholics Anonymous. (1976). *Alcoholics anonymous*, 3rd edn. New York: Alcoholics Anonymous World Services.

**Bandura, A.** (1982). Self-efficacy mechanism in human agency. *American Psychologist* 37, 122–147.

Budney, A.J., Moore, B.A., Sigmon, S., & Higgins, S.T. (2006). Contingency-management interventions for cannabis dependence. In R. Roffman & R. Stephens (eds.), *Cannabis dependence: Its nature, consequences, and treatment*. Cambridge: Cambridge University Press, pp. 155–176.

**Budney, A.J. & Higgens, S.** (1998). A community reinforcement plus vouchers approach: Treating cocaine addiction. Rockville, MD: National Institute on Drug Abuse.

**Budney, A.J. & Hughes, J.R.** (2006). The cannabis withdrawal syndrome. *Current Opinion in Psychiatry 19*, 233-238.

- Cannabis Treatment Research Project Group. (2004). Brief treatments for cannabis dependence: Findings from a randomized multisite trial. *Journal of Consulting and Clinical Psychology* 72(3), 455–466.
- Carroll, K.M., Easton, C.J., Nich, C., Hunkele, K.A., Neavins, T.M., Sinha, R., Ford, H.L., Vitolo, S.A., Doebrick, C.A., & Rounsaville, B.J. (2006). The use of contingency management and motivational/skills-building therapy to treat young adults with marijuana dependence. *Journal of Consulting and Clinical Psychology* 74(5), 955–966.
- Copeland, J., Swift, W., Roffman, R.A., & Stephens, R.S. (2001). A randomized controlled trial of brief cognitive—behavioral interventions for cannabis use disorder. *Journal of Substance Abuse Treatment 21*, 55–64.
- Dennis, M., Titus, J.C., Diamond, G., Donaldson, J., Godley, S.H., Tims, F.M., Webb, C., Kaminer, Y., Babor, T., Roebuck, M.C., Godley, M.D., Hamilton, N., Liddle, H., & Scott, C.K. (2002). The Cannabis Youth Treatment (CYT) experiment: Rationale, study design and analysis plans. *Addiction 97* Suppl 1, 16–34.
- Hettema, J., Steele, J. & Miller, W.R. (2005). A Meta-Analysis of Research on Motivational Interviewing Treatment Effectiveness (MARMITE). *Annual Review of Clinical Psychology* 1, 91–111.
- Kadden, R.M., Litt, M.D., Kabela-Cormier, E., & Petry, N.M. (2007). Abstinence rates following behavioral treatments for marijuana dependence. *Addictive Behaviours* 32(6), 1220–1236.
- Marsh, A., Dale, A. & Willis, L. (2007). Evidence Based Practice Indicators for Alcohol and Other Drug Interventions: Summary, 2nd edn. Western Australian Drug and Alcohol Office. Available on line: http://www.dao.health.wa.gov.au
- Martin, G. & Copeland, J. (2008). The Adolescent Cannabis Check-up: A randomised trial of a brief intervention for young cannabis users. *Journal of Substance Abuse Treatment* 34, 407–414.
- Mattick, R.P. & Jarvis, T. (1993). An outline for the management of alcohol problems: Quality assurance project. National Drug Strategy Monograph no. 20. Canberra: Australian Government Publishing Service.
- Miller, W.R. (1995). Motivational enhancement therapy with drug abusers. National Institute on Drug Abuse. Available on line: <a href="http://www.motivationalinterview.">http://www.motivationalinterview.</a> org/clinical/metdrugabuse.pdf

- Miller, W.R. & Rollnick, S. (eds.). (2002). *Motivational interviewing: Preparing people to change addictive behavior.* New York: Guilford Press.
- Miller, W.R. & Sanchez, V.C. (1993). Motivating young adults for treatment and lifestyle change. In Howard, G. (ed.), *Issues in alcohol use and misuse by young adults*. Notre Dame, IN: University of Notre Dame Press.
- **Project MATCH Research Group**. (1993). Project MATCH: Rationale and methods for a multisite clinical trial matching patients to alcoholism treatment. *Alcoholism: Clinical and Experimental Research 17*, 1130–1145.
- **Petry, N.M. & Simic, F.** (2002). Recent advances in the dissemination of contingency management techniques: Clinical and research perspectives. *Journal of Substance Abuse Treatment* 23, 81–86.
- Rees, V., Copeland, J. & Swift, W. (1998). A brief cognitive—behavioural intervention for cannabis dependence: Therapists' treatment manual. Technical Report no. 64. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- Sinha, R., Easton, C., Renee-Aubin, L., & Carroll, K.M. (2003). Engaging young probation-referred marijuana-abusing individuals in treatment: A pilot trial. *The American Journal on Addictions* 12, 314–323.
- Steinberg, K.L., Roffman, R.A., Carroll, K.M., Mcree, B., Babor, T.F., Miller, M., Kadden, R., Duresky, D., & Stephens, R. (2005). *Brief counselling for marijuana dependence: A manual for treating adults*. DHHS Publication No. [SMA] 05-4022. Rockville, MD: Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration.
- **Stephens, R.S., Roffman, R.A. & Simpson, E.E.** (1994). Treating adult marijuana dependence: A test of the relapse prevention model. *Journal of Consulting and Clinical Psychology* 62, 92–99.
- Stephens, R.S., Roffman, R.A. & Curtin, L. (2000). Comparison of extended versus brief treatments for marijuana use. *Journal of Consulting and Clinical Psychology 68*, 898–908.

# chapter 7: special considerations

# 7.1 Young people

Working with young people requires an understanding of the developmental issues as well as of the risk and protective factors associated with adolescent issues. It has been suggested that working with young people requires unique approaches that consider developmental processes, physical differences, and differences in belief and value systems (Winters, 1999). Typically, young people do not seek treatment. Of those who present for treatment, many have been coerced, under direction of the courts or pressure from family or schools, and may be unmotivated to change. Often not completing treatment, young people need to be given up-to-date accurate information, including harm reduction strategies, early in treatment: assessment and psycho-education should be combined during the first few sessions.

Brief motivational interventions have been demonstrated to be effective in reducing cannabis use and cannabisrelated problems in both treatment-seeking and nontreatment seeking young people (Dennis et al., 2004; Martin & Copeland, 2008). It has been suggested that the motivational approach may be particularly appropriate for young people given its emphasis on acceptance, absence of labelling, and avoidance of argumentation or hostile confrontation (Tevyaw & Monti, 2004). This accepting approach also means that the young person need not identify themselves as having a substance use problem (or potential problem) in order to participate in the intervention, which may aid the engagement of young people who do not see their behaviour as problematic, nor self-identify as having a problem (Tevyaw & Monti, 2004).

There are many factors that may reduce the likelihood of young people seeking treatment:

- young people's belief in their invincibility;
- adolescence being a natural time of experimentation;
- executive function not being fully developed;
- their not yet being socialised into seeking help;
- concern about the consequences should their cannabis use become known to schools/police/ parents

The literature provides increasing evidence that involving families in drug treatment for youth is "best practice". Involvement of families in the assessment and treatment of young people's drug-use issues is outlined in chapter 8.

Group interventions need to consider matching of young people according to key variables such as age, developmental stage, intensity of drug use, peer affiliation, and youth subculture.

The majority of the evidence supporting brief interventions with adolescent substance users comes from the "check-up" model. This intervention is designed for and tailored to the non-treatment seeker, with the intention of promoting a "taking stock" experience designed to increase motivation for change. Walker et al. (2006) note that check-up models have five elements in common:

- The prospective participant is helped to understand the nature of the check-up as something other than treatment: something that may be helpful to the individual who is questioning his or her own current behaviour or who has concerns, and something during participation in which he or she has the choice to accept or reject feedback offered.
- 2) Each "check-up" involves an assessment that captures information about behavioural patterns, positive and negative consequences as perceived by the client, and attitudes regarding changing or not changing the behaviour.
- 3) Check-ups offer personalised feedback to the participant. Commonly, personalised feedback reports (PFRs) are created from the client's assessment responses and include: normative comparison data (e.g. how the individual's drinking frequency compares with the average frequency of drinking by the general population); graphics that are used to enhance self-appraisal of the behaviour; risk-related indices; and the positive and negative consequences from changing that the client anticipates.
- 4) A style of interviewing that facilitates a candid taking stock of one's own behaviour (i.e., motivational interviewing) is essential to this type of experience.
- 5) Interventions are based on harm reduction principles and the "stages of change" model, both of which support tailoring interventions to meet individuals "where they are" in order to both reduce stigma associated with help-seeking and to encourage low-threshold access to services as a means of supporting steps (however big or small) toward change.

Check-up models have also been shown to be helpful in adult cannabis-using populations. For more information and training on check-up models, see Walker et al. (2006), Martin & Copeland (2008), and www.ncpic.org.au

# Websites for young people and mental health issues

The following websites are well designed, with young people in mind. They offer information including a wide range of self-rating scales, activities, evidence-based factsheets and interactive opportunities, including a web-based CBT program (www.moodgym.anu.edu.au) that operates as an e-couch and has been described in the literature (Burns et al., 2007).

http://www.reachout.com.au

http://www.headspace.org.au

http://www.somazone.com.au

http://www.ybblue.org.au

OR http://www.beyondblue.org.au

http://www.moodgym.anu.edu.au

#### 7.2 Gender

Alcohol and other drug services have typically failed to meet the special needs of substance-dependent women. Given the dearth of cannabis-specific services, it is not surprising that there are a limited number with gender-specific programs. It should be remembered that women have some special constraints on accessing treatment. These include a particular sensitivity to the stigma associated with dependency in women, especially while pregnant (Zeese & Lewin, 1999); higher rates of trauma and of comorbid mental health rates (especially for depression, anxiety, somatic, and personality disorders); and difficulties with physical access because of parental responsibilities. In recent decades, the number of women using cannabis increased, subsequently reducing at a slower rate than the number of males such that they now converge for 14- to 19-year-olds. Motives for use may differ between men and women, males more motivated by mood enhancement and women using to cope with chronic stress or tension (Chabrol et al., 2005), which may account for the higher rates of anxiety and depression reported in women cannabis users (Copeland, 2006; Degenhardt, Hall & Lysnkey, 2003; Poulin et al., 2005). Higher rates of mental disorders among female cannabis users are already apparent in adolescence (Tu, Ratner & Johnson, 2008), which may suggest that early intervention for mental health problems may reduce the numbers of women seeking treatment in the future.

Men initiate cannabis use earlier than do women, make up the majority of cannabis users, and more commonly seek cannabis-use treatment. This suggests that drug education programs aimed at prevention and identification of problem use should be developed specifically for boys and provided to them earlier than programs are presented to girls. Specific issues facing men include links between drug use and anger and/or violence, and higher rates of completed suicides. These are important issues to be addressed in treatment. It should be noted that men respond better to concrete, action-oriented treatment approaches (such as CBT) and perform better in mixed-gender groups (Marsh & Dale, 2006).

# 7.3 Culturally and linguistically diverse populations

People from culturally and linguistically diverse (CALD) backgrounds are less likely to access drug-treatment services than are those from the predominant culture; and if they do, it is after a longer period of time spent coping alone with their drug issues (Reid, Crofts & Beyer, 2001). Research has identified several contributing factors. These include lack of knowledge about the services available; lack of trust in the services; an unfamiliarity with seeking help outside the family or community unit for any problem; and great stigma and shame surrounding drug use, which makes seeking help for this problem particularly difficult (Donato-Hunt, 2007). Developing an effective therapeutic relationship needs to take into account these factors if a treatment approach is to be successful.

When working with people from CALD populations, it is important to consider the cultural context of cannabis use. Houseman (2003) recommends that, in order to understand the cultural context of use and to provide treatment in a culturally secure way, clinicians develop an understanding of a client's cultural experience and beliefs in three core domains:

- migration experience and context of migration
- ethnic subgroup membership
- beliefs in relation to the dominant culture –
   ascertaining whether the client's beliefs are
   traditional, acculturated, or a blend of the two

The Drug and Alcohol Multicultural Education Centre (DAMEC) recommends that clinicians be aware of a client's degree of English comprehension. Importantly, comprehension will affect clients' ability to communicate their expectations for treatment, which can have a serious effect on the therapeutic relationship and treatment outcome; furthermore, it will affect a client's participation and understanding

in a group-treatment setting. Avoiding jargon and minimising reliance on written information and written homework will ease communication. The use of an interpreter in some cases can be helpful but can result in numerous problems. Dale, Marsh, and Willis (2007) recommend that clinicians be aware of the potential problems of using an interpreter: primarily in confidentiality and accurate translation.

It is recommended that referral to ethnospecific services is ideal; and that in lieu of the availability of treatment services for every cultural group in the community, using cultural consulation in colloboration with an AOD-treatment service is likely to provide the best treatment outcomes (Dale, Marsh & Willis, 2007) It is useful to meet with a cultural consultant prior to meeting with a client. Cultural consultation can provide assistance and guidance in the following:

- gaining knowledge about the client's cultural background
- tailoring manualised treatments
- · tailoring any written material provided to the client
- assessing the understanding of homework tasks
- providing guidance in utilising the community
- providing guidance in the role of gender in treatment

If a cultural consultant is unavailable, ascertain the client's preferred approach.

### 7.4 Indigenous populations

Cannabis use by Indigenous Australians is common and presents a significant health concern (Clough et al., 2004). For example, the Western Australian Aboriginal Child Health Survey (2005), which surveyed the emotional and social wellbeing of 5289 young Aboriginal people aged up to 17 years and living in Western Australia Blair et al. (2005), indicated the following:

- thirty per cent of young people in the sample had used cannabis at some time in their lives
- forty-five per cent of males and 21% of females used cannabis at least weekly
- seventy-five per cent of those sampled who drank alcohol and smoked cigarettes also regularly used cannabis, in comparison with eight per cent of those who neither drank alcohol nor smoke cigarettes

Similarly, Clough and colleagues have reported a lifetime prevalence of cannabis use of 77% of males and 61% of females in a random sample of 190 people (17–36 years) from two communities in Arnhem Land.

In providing treatment to Indigenous clients, the following are recommended for culturally secure service provision:

- given the prevalence of cannabis use, include screening for cannabis use in all primary health-care and general-counselling settings
- develop an awareness of the terms and nonverbal gestures denoting cannabis in the local community
- recognise that questionnaires and other assessment methodologies may not be appropriate. When providing feedback on any measures, be aware that scores in relation to the general population may have little significant meaning to a client
- if possible, give the client the opportunity to choose to have an Indigenous worker present of the same sex or to have a referral made to an Indigenous-specific service
- get to know the local history of colonisation, and work within that knowledge
- receive cultural-awareness training
- ensure that treatment occur within the Indigenous definition of health
- in consultation with the client, aim to include family and community systems. Maintain confidentiality while doing so
- consult with an Indigenous cultural consultant, or attain Indigenous supervision, to discuss treatment appropriateness and any matters concerning shame and confidentiality
- be aware of the intensity of the grief and loss that continue to affect many Indigenous communities, and consider this in formulations and treatment approaches (Dale, Marsh & Willis, 2007)
- provide clinical services in a flexible manner; cultural and family obligations will often take precedence over appointments (Dale, Marsh & Willis, 2007)
- have an awareness of a client's English-language comprehension and literacy, and reduce clinical jargon and reliance on written information and homework tasks accordingly

Existing styles of practice are not always sensitive to the cultural beliefs and family systems of Aboriginal people. Strong Spirit Strong Mind (Casey & Keen, 2005) is one example of an alcohol and other drug intervention that applies CBT in a culturally secure way. The Strong Spirit Strong Mind resources outline how the inner spirit can be applied in a therapeutic context and incorporates culturally secure CBT. The model provides a structure for understanding the effects and implications of colonisation and of the introduction of alcohol and other drugs, and is consistent with 'social learning theory'.

#### **Useful resources:**

Casey, W. & Keen, J. (2005). Strong Spirit Strong Mind, Aboriginal alcohol and other drugs worker resource: A guide to working with our people, families and communities. Aboriginal Alcohol and other Drugs Program, WA Drug and Alcohol office.

**Dudgeon, Garvey & Pickett's** (2000) *Working With Indigenous Australians: A Handbook for Psychologists* (Perth: Gunada Press, Curtin Indigenous Research Centre).

http://www.hc-sc.gc.ca/fniah-spnia/substan/ads/nnadap-pnlaada-eng.php

# 7.5 Clients who are diverted to treatment or are otherwise involuntary

Involuntary referrals are very common in cannabis treatment with the introduction of diversion strategies within several jurisdictions internationally. There are, however, other types of coercion. These include referral of parents in relation to child protection; requirements by employers; referral of adolescents by parents or school; and coercion by somebody close.

There is limited research assessing the efficacy of legally coerced treatment, despite a third of referrals to alcohol and other drug treatment agencies across Australia being recorded as being from the criminal justice system. A recent evaluation of the NSW Drug Court (Weatherburn et al., 2008) found positive outcomes, as did a review of police drug-diversion programs in Australia (Ogilvie & Willis, 2009). A study of adults attending drug treatment in Texas reported that those legally coerced into treatment had less psychological distress, were more likely to complete treatment, and were less likely to be using cannabis at 90 days post treatment than were voluntary clients (Copeland & Maxwell, 2007).

#### In session:

- · discuss expectations at point of referral
- acknowledge why they are there, and validate their feelings about being diverted/coerced into treatment
- acknowledge that there may be a formal monitoring of progress, and any other limits to confidentiality
- engagement and motivation enhancement therapy is more important than assessment
- many coerced clients are not interested in modifying their use. In this case, carefully consider harm minimisation strategies (depending on criminal justice status or goals of abstinence/ reduction in use)

# 7.6 Reducing use in those not seeking treatment

In common with users of other drugs, the majority of cannabis users do not seek professional treatment. It is, therefore, important that a range of activities including health promotion occur in a variety of contexts to raise the profile of treatment options.

There are opportunities to be proactive to provide early intervention to prevent cannabis use from becoming problematic. General information about cannabis use and treatment options can be disseminated through settings such as health services, GPs, community settings, youth services, and schools. Initiatives may include:

- health promotion activities in various settings, including community education about the health, social, and legal consequences of cannabis use and about how interventions can be accessed if required;
- programs of peer education, by present and former cannabis users, about the harms of cannabis, harm reduction strategies, and the treatments and services available

#### 7.7 Individual vs group treatment

The cannabis intervention studies reported in the literature include group and individual interventions. Whilst many clients prefer an individual approach, evidence shows that CBT can be beneficial when offered in a group setting (Stephens et al., 1994; Stephens et al., 2000; Marques & Formigoni, 2001). In order to deliver CBT effectively in a group setting, clinicians need to be proficient in group processes.

## Considerations

Things for agencies to consider when developing group or individual programs include:

- the skill of clinicians in delivering group-based CBT or other intervention;
- the ability of the organisation to conduct preassessments to match group members on key variables such as age, peer affiliation, youth subculture, degree of dependence, developmental stage, and gender balance;
- the interest of clients to engage in-group work.
   Generally speaking, it is harder to attract people to groups, due to stigma and embarrassment;
- group dynamics, which may either negatively or positively affect group cohesion; The greatest risk is when the membership is diverse, with limited common experiences;
- that services may be able to respond more quickly to client needs (through reduced waiting lists) through groups but dropout may be higher

For clinicians wishing to consider groups for cannabis, we recommend the Cannabis Youth Treatment manual, available on line at <a href="http://ncadi.samhsa.gov/govpubs/bkd384/OK">http://ncadi.samhsa.gov/govpubs/bkd384/OK</a>

# 7.8 Treatment settings

Although cannabis treatment rarely requires in-patient care, a client's immediate environment may interfere with his or her ability to achieve abstinence in an outpatient setting. There is a lack of well-conducted studies assessing the efficacy of residential in comparison with community-based treatment of substance use disorders and the efficacy of specific types of residential treatment. Residential treatment may be considered for those clients who are seeking abstinence and who have significant comorbid physical, mental health or social (for example, housing) problems. The client should typically have attempted a community-based psychosocial treatment first. Any additional benefit that might accrue from a period in residential rehabilitation over and above that obtained from the initial period of detoxification is likely to be related to the chronicity of the dependence and/or comorbid psychosocial problems. When symptomatic medication for withdrawal symptoms seems appropriate, links between prescribers and treating agencies are important.

When considering an in-patient or residential setting with clients, the relevant issues include:

- whether the home environment is an appropriate setting for detoxification (i.e. whether supports are available; availability of stable accommodation; number of failed outpatient attempts);
- whether the client has comorbid physical ill health or mental health issues;
- whether the client is withdrawing from multiple substances;
- the client's preference

#### 7.9 Early termination of treatment

Even after intake and acceptance into treatment, individuals are often ambivalent about going on to begin it, and the risk of dropout at this point is high. It is common for even those seeking treatment to not stay long enough to benefit (Hser et al., 1997). Pre-treatment dropout of people with cannabis dependence is associated with a range of social instability and socioeconomic factors. These include being unemployed, unmarried, less educated, and young (Vendetti et al., 2002). Individuals who do not perceive themselves to be "dependent" on cannabis have been found to be almost four times as likely to be

pre-treatment dropouts than those who acknowledged their cannabis dependence.

What if an adolescent drops out of treatment?

Young people should be more assertively followed up. Follow-up tips:

- use a phone call (minimum) followed by a letter (handwritten letters on an official agency letterhead may lead to better re-engagement)
- research suggests that confirming appointments by text/SMS increases attendance

# 7.10 Continuing care

Follow-up sessions or booster sessions are also good clinical practice in the management of cannabisuse disorder. The timing of a follow-up session may depend on issues such as the magnitude of the problem, the skills the client needs to practise between sessions, and the capacity of the clinician and of the service. Studies have examined a number of styles of continued care. There is still much to learn about:

- the usefulness of more frequent or even continuous monitoring in improving outcomes;
- the effect of less formal types of care (e.g. recovery coaches and faith-based interventions);
   and
- modes of service delivery such as mail, telephone, Internet, and e-mail

All clinicians are encouraged to develop their own models that consider resource issues and capacity limits, as the research indicates that regardless of what method you use, if you do it well, positive client outcomes increase. Two such methods are discussed below.

## Telephone-based continuing care

The use of telephone-based interventions is novel and gaining popularity as a low-cost option. Results suggest that weekly telephone delivery of continuing care after in-patient/residential care can lead to improved outcomes (Cacciola et al., 2008). The authors recommended that follow-up procedures be explained to clients in detail from the time of admission. This raises participation rates and lowers rates of unplanned discharges. Procedures for the number of attempted calls and for increasing the intensity or frequency of contact attempts following missed phone sessions need to be clearly documented.

### Assertive continuing care (ACC)

In order to reduce relapse rates, a structured plan for following up clients who have recently left treatment (regardless of setting) is important. Assertive continuing care is care in which the clinician takes an active role in supporting the client to receive continuing support. A study of young people leaving residential rehabilitation for continuing-care services showed that they were more likely to be abstinent from cannabis three months later than those not receiving ACC (Godley, Godley & Dennis, 2002).

The process generally starts with the clinicians meeting the client before discharge. Subsequently, the clinician provides outpatient or phone support and help to negotiate additional treatment services, which may include school support, probation, and other services to support recovery. Continuing-care plans may include brokerage of links to local outpatient treatment programs and self- or mutual-help groups.

#### **Considerations**

The following guidelines are recommended as the minimum for continuing care:

- despite the difficulty of following up clients, it should be given high priority
- the format for follow-up procedures should be explained to clients before discharge. They should have the option of not participating in follow-up, but its importance should be emphasised to them
- the first follow-up session should be scheduled before the client completes treatment
- advise the referring agency of the outcome of treatment and of your intentions regarding follow-up
- preference should be given to face-to-face (individual or group) or telephone follow-up, although even written contact has benefits
- follow-up should be arranged at periodic intervals after completion, at a frequency within your resources

## 7.11 Other therapies

Whilst the evidence regarding cannabis-use disorder supports the use of CBT and MET, there may be reasons to consider other modes of therapy (e.g., complexity, resistance to CBT, or your previous clinical training). The following therapies were found by the NSW Health Drug and Alcohol Psychosocial Interventions Professional Practice Guidelines (NSW Department of Health, 2008) to be supported by at least level 2 or 3 research and clinical opinion.

 mindfulness-based stress reduction (developed by Segal, Williams & Teasdale, 2002)

- this is a meditative practice with Buddhist origins
- attention is focused on physical, emotional, and cognitive experiences in the present moment
- dialectical behavioural therapy (DBT) (developed by Linehan, 1993)
  - this is adapted from treatments with borderline personality disorder. It involves CBT and mindfulness approaches to include group skills training, behavioural and cognitive modification of problem behaviours, reflection, empathy, and acceptance
  - DBT has been adapted to specifically target problematic alcohol and other drug use, and improved outcomes have been reported
- acceptance and commitment therapy (ACT) (developed by Hayes & Strosahl, 2004)
  - this approach teaches people to explore painful events such as thoughts, memories, feelings, and bodily sensations rather than avoid them
  - research suggests that ACT is effective with stress management, depression, pain, chronic illness, and drug dependence
- solution focused brief therapy (SFBT) (developed by de Shazer, 1985)
  - this approach assumes that the client is willing and motivated to change, and treatment helps him or her imagine what would he or she would like to be different and what can be done to bring about that change
  - a meta-analysis of SFBT approaches found a positive treatment effect (Kim, 2008)
- psychodynamic approaches
  - these focus on the effects of external stimuli
  - treatment is generally long-term (lasting from 16 weekly sessions to several years)

# **7.12 Internet approaches**

Self-help strategies offer a promising solution to the accessibility difficulties of face-to-face treatment, and the Internet provides an excellent delivery mode for such strategies. Studies have demonstrated the efficacy of web-based treatment in reducing the use of alcohol (e.g. Doumas & Hannah, 2008; Kypri et al., 2008; Riper et al., 2008) and tobacco (e.g., An et al., 2008). No published study has tested the effectiveness of web-based specialist treatment for cannabis use.

### 7.13 Concurrent drug use

#### Tobacco use

For clients who smoke cannabis and use tobacco (independently and/or mixed with cannabis), the evidence for quitting simultaneously is mixed. One study found that smoking cessation did not disrupt alcohol abstinence and suggested that quitting both may enhance the likelihood of longer-term sobriety (Gulliver, Kamholz & Helstrom, 2006). A further study found that symptoms of withdrawal were more severe during simultaneous cessation, but that the differences were of short duration and not robust; substantial individual differences were noted (Vandrey et al., 2008). Sullivan and Covey's (2002) review of clinical trials found that continued smoking adversely affects treatment for cannabis dependence.

A client's inability or unwillingness to cease tobacco use should not, however, be a barrier to accessing or continuing cannabis treatment. Clients who mix tobacco with their cannabis may not identify themselves as tobacco smokers, so careful assessment of comorbid nicotine dependence and feedback of the risks of using tobacco are warranted.

"Difficulty in tobacco cessation might be considered one of the most important adverse effects of marijuana use" (Ford, Vu & Anthony, 2002, p. 247).

#### Overview

 tobacco use has been associated with increased cannabis dependence (Ream et al., 2008; Okoli et al., 2008) and makes quitting cannabis more difficult (Patton et al., 2006)

#### Steps

- assess nicotine dependence by clinical interview or the Fagerström Nicotine Dependence Questionnaire
- assess readiness to change tobacco use concurrently
- if the client is ready, discuss and/or refer him or her for pharmacotherapy options such as Nicotine Replacement Therapy (NRT), buproprion (Zyban), or varenicline (Champix). Various options appear in Table 15
- in Australia, Champix has superseded Zyban
- note: clinicians are encouraged to monitor the results of clinical trials of nicotine replacementtherapy options, as this field is rapidly expanding

NB: The Fagerström Nicotine Dependence Questionnaire may not be appropriate for those who do not smoke tobacco independently of their cannabis.

# Review of nicotine-replacement therapy (NRT)

A Cochrane review (Stead et al., 2008) of 132 trials of NRT, with over 40,000 people, found that all forms of NRT made it more likely that a person's attempt to quit smoking would succeed. The chances of stopping smoking were increased by 50 to 70% (based on a 15-cigarette-a-day habit).

#### Other results include that:

- there are no overall differences in the effectiveness of different forms of NRT, nor a benefit from using patches beyond eight weeks
- NRT works with or without additional counselling
- heavier smokers may need higher doses of NRT
- people who use NRT during a quit attempt are likely to further increase their chance of success by using a combination of the nicotine patch and a faster-acting form
- preliminary data suggest that starting to use NRT shortly before the planned quit date may increase the chance of success

Table 15: Options for nicotine-replacement therapy

Preparation	Method	Possible side effects	Dosing
Transdermal patches	16 hr and 24 hr patches are available They are placed on a relatively hairless part of the body between neck and ankle	Local irritation may occur	1 patch per day
Sublingual tablets	A microtab is placed under the tongue and absorbed	Some burning sensation in mouth	15-20 tablets/day
Lozenges	A lozenge is placed in the mouth	Some burning sensation in mouth	10-15/day
Chewing gum	Chew gum for a few minutes then rest in mouth Repeat, changing sides Limit time per piece to 20 minutes	Some burning sensation in mouth Aching jaw	1–15/day
Nasal spray	One squirt per nostril	Some burning sensation in nostrils Sneezing and eyes may water	2 squirts regularly throughout day
Inhalator	Puffed on as with a cigarette	N/A	3–6 cartridges

Adapted from McEwen, Hajek, McRobbie, & West (2006), Manual of Smoking Cessation: A Guide for Counsellors and Practitioners.

### **CAUTION**

Caution should be taken when prescribing buproprion (Zyban) during cannabis withdrawal, as it may exacerbate withdrawal symptoms.

There is no evidence base for NRT among young people.

NRT is available over the counter at pharmacies but is not subsidised by the Pharmaceutical Benefits Scheme (PBS). Champix and Zyban are available only by prescription from a medical practitioner and are subsidised by the PBS. At this time, there are no published clinical trials of the use of NRT and Champix for use in either cannabis dependence or nicotine and cannabis dependence. There is one published clinical trial of the use of Zyban in cannabis dependence with poor outcomes because of the significant side effects of the bupropion's exacerbation of cannabis withdrawal.

# Concurrent benzodiazepine use

For cannabis users seeking treatment for their cannabis use and also either using benzodiazepines for a recognised condition or dependence on benzodiazepines, the following is recommended:

Steps	Recommendations for medical management
1	Stabilise benzodiazepine use: this can be achieved by a reduction regime and capping the number of tablets consumed each day at a number that you and the client are agreed is manageable
2	Selective detoxification from cannabis: clients reduce their cannabis use while maintaining the current dose of benzodiazepines
3	Monitor and maintain benzodiazepine use: check with client regularly to ensure that there is no escalation of benzodiazepine use
4	After the cannabis use has ceased (or been reduced and stabilised), consider the options for withdrawal from or reduction of benzodiazepines with medical supervision

# 7.14 Dealing with time constraints

Throughout these guidelines we have talked about shaping interventions to the needs of the client. Interventions will also be shaped, however, by the setting in which you work and, realistically, by the time you have available. The following is a guide for shaping your interventions (adapted from Shand et al., 2003).

Table 16: Settings with time constraints

No time	<ul> <li>provide pamphlets about quitting cannabis (www.ncpic.org.au)</li> </ul>
30 mins	<ul> <li>screen</li> <li>give simple advice about the harms associated with cannabis use</li> <li>offer a follow-up appointment</li> </ul>
60-90 mins	<ul> <li>assessment of cannabis and other issues and personalised feedback</li> <li>discuss self-management and treatment options</li> <li>provide self-help material</li> <li>offer follow-up appointments</li> </ul>

## **7.15 Summary**

Recommendations	Evidence
In most instances, cannabis dependence can be treated in an outpatient setting, using MI/ CBT interventions	А
Whilst not tested outside research trials, the addition of CM to MI/CBT has been shown to improve outcomes	А
Comorbid dependencies are common and can be treated simultaneously, e.g. nicotine dependence with NRT	С
Whilst there is no research to guide the optimum number of sessions, courses of one to nine sessions have been tested with positive outcomes	С
Continued care and assertive follow-up are important aspects of treatment	В

#### 7.16 References

An, L.C., Klatt, C., Perry, C.L., Lein, E.B., Hennrikus, D.J., Pallonen, U.E., Bliss, R.L., Lando, H.A., Farley, D.M., Ahluwalia, J.S., & Ehlinger, E.P. (2008). The realU online cessation intervention for college smokers: A randomized controlled trial. *Preventive Medicine* 47(2), 194–199. Available on line: <a href="http://dx.doi.org/doi:10.1016/j.">http://dx.doi.org/doi:10.1016/j.</a> ypmed.2008.04.011

**Blair, M.E., Zubrick, S.R., & Cox, A.H.** (2005). The Western Australian Aboriginal Child Health Survey: findings to date on adolescents. *Medical Journal of Australia*. 183(8), 433-435.

Burns, J., Morey, C., Lagelée, A., Mackenzie, A., & Nicholas, J. (2007). Reach Out!: Innovation in service delivery. *Medical Journal of Australia* 187(7), S31–S34.

Cacciola, J., Camilleri, A., Carise, D., Rikoon, S., McKay, J., McLellan, T., Wilson, C., & Schwarzlose, J.T. (2008). Extending residential care through telephone counseling: Initial results from the Betty Ford Center Focused Continuing Care protocol. *Addictive Behaviors* 33(9), 1208–1216.

Casey, W. & Keen, J. (2005). Strong Spirit Strong Mind, Aboriginal alcohol and other drugs worker resource: A guide to working with our people, families and communities. Aboriginal Alcohol and other Drugs Program, WA Drug and Alcohol office.

Chabrol, H., Duconge, E., Casas, C., Roura, C., & Carey, K.B. (2005). Relations between cannabis use and dependence, motives for cannabis use and anxious, depressive and borderline symptomatology. *Addictive Behaviours* 30, 829–840.

Clough, A., d'Abbs, P., Cairney, S., Gray, D., Maruff, P., Parker, R., & O'Reilly, B. (2004). Emerging patterns of cannabis and other substance use in Aboriginal communities in Arnhem Land, Northern Territory: A study of two communities. *Drug and Alcohol Review 23*(4), 381–390.

**Copeland, J.** (2006). Cannabis use, depression and public health. *Addiction* 101, 1380.

**Copeland, J. & Maxwell, J.** (2007). Correlates and outcomes of cannabis treatment among legally coerced versus noncoerced adults in Texas. *BMC Public Health 7*, 111.

**de Shazer, S.** (1985). *Keys to solution in brief therapy.* New York: Norton.

Degenhardt, L., Hall, W. & Lynskey, M. (2003). Exploring the association between cannabis use and depression. *Addiction 98*, 1493–1504.

Dennis, M., Godley, S.H., Diamond, G., Tims, F.M., Babor, T., Donaldson, J. et al. (2004). The Cannabis Youth Treatment (CYT) study: Main findings from two randomized trials. *Journal of Substance Abuse Treatment* 27, 197-213.

**Donato-Hunt, C.** (2007). Issues for CLD clients in accessing appropriate treatment. *DrugInfo Newsletter 5*(2), 2.

**Doumas, D. & Hannah, E.** (2008). Preventing highrisk drinking in youth in the workplace: A web-based normative feedback program. *Journal of Substance Abuse Treatment* 34, 263–271.

**Dudgeon, P., Garvey, D. & Pickett, H.** (2000). *Working with Indigenous Australians: A handbook for psychologists*. Perth: Gunada Press.

**Ford, D.E., Vu, H.T. & Anthony, J.C.** (2002). Marijuana use and cessation of tobacco smoking in adults from a community sample. *Drug and Alcohol Dependence 67*, 243–248.

Godley, S.H., Godley, M.D. & Dennis, M.L. (2001). The Assertive Aftercare Protocol for adolescent substance abusers. In E.F. Wagner & H.B. Waldron (eds.), *Innovations* 

- *in adolescent substance abuse interventions*. New York: Pergamon, pp. 313–331.
- Godley, S.H., Meyers, R.J., Smith, J.E., Karvinen, T., Titus, J.C., Godley, M.D., Dent, G., Passetti, L., & Kelberg, P. (2001). The adolescent community reinforcement approach for adolescent cannabis users. Cannabis Youth Treatment (CYT) series, Vol. 4. DHHS Pub. no. 01–3489. Rockville, MD: Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration. Available on line at <a href="http://www.chestnut.org/li/cyt/">http://www.chestnut.org/li/cyt/</a> products/acra\_cyt\_v4.pdf
- Gulliver, S.B., Kamholz, B.W & Helstrom, A.W. (2006). Smoking cessation and alcohol abstinence: What do the data tell us? *Alcohol Research & Health* 29(3), 208–212.
- Hayes, S. & Strosahl, K.D. (eds.). (2004). *A practical guide to acceptance and commitment therapy*. Heidelberg, Germany: Birkhäuser.
- **Houseman, D.** (2003). A framework for working with alcohol and other drug clients from diverse communities. Melbourne: Victorian Dept of Human Services.
- Hser, Y.I., Anglin, M.D., Grella, C.E., Longshore, D., & Prendergast, M.L. (1997). Drug treatment careers: A conceptual framework and existing research findings. *Journal of Substance Abuse Treatment* 14(6), 543–558.
- Kim, J. (2008). Examining the effectiveness of solutionfocused brief therapy: A meta-analysis. *Research on Social Work Practice* 18, 107–116.
- Kypri, K., Langley, J.D., Saunders, J.B., Cashell-Smith, M.L., & Herbison, P. (2008). Randomized controlled trial of web-based alcohol screening and brief intervention in primary care. *Archives of Internal Medicine* 168, 130–136.
- **Linehan, M.M.** (1993). *Cognitive behavioral treatment of borderline personality disorder.* New York: Guilford Press.
- Marsh, A. & Dale, A. (2006). *Addiction counseling: Content and process*. Melbourne: IP Communications.
- Marsh, A., Dale, A. & Willis, L. (2007). Evidence
  Based Practice Indicators for Alcohol and Other Drug
  Interventions: Summary, 2nd edn. Western Australian Drug
  and Alcohol Office. Available on line:
  http://www.dao.health.wa.gov.au
- Martin, G. & Copeland, J. (2008). The Adolescent Cannabis Check-up: A randomised trial of a brief intervention for young cannabis users. *Journal of Substance Abuse Treatment* 34, 407–414.
- McEwen, A., Hajek, P., McRobbie, H., & West, R. (2006). *Manual of smoking cessation: A guide for counsellors and practitioners*. Oxford UK: Blackwell Publishing

- **Marques, A. & Formigoni, M.** (2001). Comparison of individual and group cognitive-behavioral therapy for alcohol and/or drug-dependent patients. *Addiction 96*, 835–846.
- NSW Department of Health. (2008). NSW Health Drug and Alcohol Psychosocial Interventions Professional Practice Guidelines. Available on line: http://www.health.nsw.gov.au
- **Ogilvie, J. & Willis, K.** (2009). *Police drug diversion in Australia*. Criminal Justice Bulletin series no. 3. Available on line: http://www.ncpic.org.au
- Okoli, C.T.C., Richardson, C. & Johnson, J.L. (2008). An examination of the relationship between adolescents' initial smoking experience and their exposure to peer and family member smoking. *Addictive Behaviors 33* (9), 1183–1191.
- Patton, G.C., Coffey, C., Carlin, J.B., Sawyer, S.M., & Lynskey, M. (2005). Reverse gateways? Frequent cannabis use as a predictor of tobacco initiation and nicotine dependence. *Addiction 100*, 1518–1525.
- **Poulin, C., Hand, D., Boudreau, B., & Santor, D.** (2005). Gender differences in the association between substance use and elevated depressive symptoms in a general adolescent population. *Addiction 100*, 525–535.
- Ream, G., Benoit, E., Johnson, B., & Dunlap, E. (2008). Smoking tobacco along with marijuana increases symptoms of cannabis dependence. *Drug and Alcohol Dependence* 95(3), 199–208.
- **Reid, G., Crofts, N. & Beyer, L.** (2001). Drug treatment services for ethnic communities in Victoria, Australia: An examination of cultural and institutional barriers. *Ethnicity and Health* 6(1), 13–26.
- Riper, H., Kramer, J., Smit, F., Conijn, B., Schippers, G., & Cuijpers, P. (2008). Web-based self-help for problem drinkers: A pragmatic randomized trial. *Addiction 103*, 218–227.
- Segal, Z., Williams, J.M.G. & Teasdale, J.D. (2002). Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse. New York: Guilford Press.
- Shand, F., Gates, J., Fawcett, J., & Mattick, R. (2003). Guidelines for the treatment of alcohol problems. Canberra: Australian Government Department of Health and Ageing.
- Stead, L.F., Perer, R., Bullen, C., Mant, D., & Lancaster, T. (2008). Nicotine replacement therapy for smoking cessation. Cochrane Database of Systematic Reviews 1 (art. no. CD000146). Available on line: http://dx.doi.org/10.1002/14651858.CD000146.pub3

Stephens, R.S., Roffman, R.A. & Simpson, E.E. (1994). Treating adult marijuana dependence: A test of the relapse prevention model. *Journal of Consulting and Clinical Psychology* 62, 92–99.

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

**Sullivan, M. & Covey, L.** (2002). Current perspectives on smoking cessation among substance abusers. *Current Psychiatry Reports* 4, 388–396.

**Tevyaw, T.O. & Monti, P.M.** (2004). Motivational enhancement and other brief interventions for adolescent substance abuse: Foundations, applications and evaluations. *Addiction* 99, 63–75.

Tu, A.W., Ratner, P.A. & Johnson, J.L. (2008). Gender differences in the correlates of adolescents' cannabis use. *Substance Use and Misuse* 43(10), 1438–1463.

**Vandrey, R.G., Budney, A., Hughes, J., & Liguori, A.** (2008). A within-subject comparison of withdrawal symptoms during abstinence from cannabis, tobacco, and both substances. *Drug and Alcohol Dependence 92*(1–3), 48–54.

Vendetti, J., McRee, B., Miller, M., Christiansen, K., Herrell, J., & The Marijuana Treatment Project Research Group. (2002). Correlates of pre-treatment drop-out among persons with marijuana dependence. *Addiction 97* Suppl. 1, 125–134.

Walker, D., Roffman, R., Stephens, R., Berghuis, J., & Kim, W. (2006). A brief motivational enhancement intervention for adolescent marijuana users: A preliminary randomized controlled trial. *Journal of Consulting and Clinical Psychology* 74(3), 628–632.

Weatherburn, D., Jones, C., Snowball, L., & Hua, J. (2008). *The NSW drug court: A re-evaluation of its effectiveness*. Crime and Justice Bulletin no. 121. Sydney: NSW Bureau of Crime Statistics and Research.

Winters, K.C. (1999) Treatment of adolescents with substance use disorders. Treatment Improvement Protocol Series 32. Substance Abuse and Mental Health Service Admin (SAMHSA). Centre for Substance Abuse Treatment: Rockville MD.

**Zeese, K.B. & Lewin, P.M.** (1999). Reduce drug abuse and use among women: The Effective National Drug Control Strategy 1999. Common Sense for Drug Policy: Falls Church, VA.

# chapter 8: family interventions

#### 8.1 Families

Children may experience the negative consequences of their parents' drug use. A recent report noted that approximately 10% of children live in households in which there is parental alcohol or other drug abuse or dependence. In addition, 24 out of every 1000 Australian children under the age of 12 years will be exposed to at least one individual who uses cannabis on a daily basis (Frye et al., 2008).

Considering families is an important aspect of treatment, particularly in relation to adolescent clients. This chapter considers engaging family members, regardless of whether the cannabis user is the parent or the child. The interventions mentioned in this chapter can be implemented at any stage of treatment as deemed appropriate. Clinicians and settings will vary in their practices and in their capacity to provide interventions to family members. Clinicians are encouraged to do their own formal assessment of an individual family's willingness and capacity to undergo family-oriented treatment. A comprehensive assessment should include a mental health and drug-use assessment of the parents, and potential referral for individual treatment of these issues. Below are listed principles and varying levels of intervention by which to support families that clinicians can consider. These interventions can be implemented at any stage of treatment as deemed appropriate. Please note that these interventions are recommended only for clinicians with prior training and experience in working with families.

# 8.2 Principles of family-inclusive practice

- involving families in treatment services can lead to better outcomes for the individual
- clients are the best judges of who their family is, and of the extent to which their family should be involved in treatment
- families are capable and often willing to change to support the individual in treatment
- staff members need to be adequately trained and equipped to work with families

(Patterson & Clapp, 2004)

### 8.3 Confidentiality

When working with more than one family member, clinicians often face the dilemma of breaching client confidentiality. Family-inclusive practice supports the rights of all clients to a confidential service. It is the right of the client to determine to whom he or she

or others will disclose details of their treatment. No information regarding a person's treatment should be given without the client's explicit (we recommend written) consent.

The following are worth clinicians' consideration:

- discussing the clinician's limits of confidentiality (such as in dealing with child protection or self harm):
- developing "release of information" forms that detail the specifics of what information is to be released;
- establishing confidentiality guidelines with all parties prior to commencing joint sessions;
- discussing with clients what information is recorded in their case notes

# 8.4 "Level of engagement"

Patterson and Clapp (2004) have described different "levels of engagement" in working with families, depending on the family's coping skills and involvement with the cannabis user.

### Level 1: considering families when working with clients

At the point of contact, clinicians may ask clients questions that relate to family and significant others.

Examples could include:

"Who is important in your life at this moment?"

"How do they support you?"

"Do they know you are attending the service?"

"Would you like them to be involved in treatment and in what way?"

It is the clinician's role to keep the concept of family alive in all continuing client work and to take into consideration any changes in circumstances or in intensity of support. Genograms (pictorial displays of family relationships) may assist clinicians to explore and conceptualise family relationship and potential alliances.

# Level 2: telephone support to families

Telephone support generally involves providing information and support over the phone to family members. It differs from telephone counselling in that it often involves a single contact with the client and focuses more on information-giving than on therapeutic support.

Family members may be offered:

- validation of concerns;
- information about cannabis withdrawal and what to expect;

- information on the general treatments available for cannabis dependence;
- referral information;
- crisis intervention;
- problem-solving

# Level 3: effective referral of families to other support services

Organisations or clinicians offering effective referral should keep an up-to-date list of agencies offering services in their local area. Services may include support groups, community health centres, family-support agencies, and allied health professionals.

In intervention of this type, it is recommended that:

- any databases be updated at least six-monthly;
- you make direct contact with services or people to gather information about the referral processes, referral criteria, the type of service they offer, the length of the treatment, and treatment costs;
- you conduct active referral: calling the family members to see whether they have made contact with the referred service, or supporting the family to make contact

# Level 4: establishment of facilitated support groups for families

If you or your organisation has the capacity, facilitated support groups for family members are a forum for providing access to information about cannabis and its effects. Groups are generally developed and facilitated by experienced clinicians who have skills at managing complexity in groups. They differ from self-help groups in that they are time-limited, participants are registered as clients, and the organisation has responsibility for facilitation.

Facilitated support groups can provide support and safety for members to normalise reactions, decrease feelings of isolation, and increase coping skills in relation to the client's drug use. They provide a forum in which clients can ask questions and receive responses from skilled and experienced practitioners and in which family members can learn from others present the resources and supports available in the wider community.

# Level 5: single-session family therapy

Single-session therapy is a consultation aimed at taking best advantage of the organisation's existing resources and of clients' readiness to change, using the principles and ideas of family therapy and brief solution-focused therapy. A single session can include

the client and family members or can be undertaken with a single family member.

Interested clinicians are encouraged to seek training for single-session therapy.

Single-session therapy has three discreet phases:

- Intake: the family members complete an intake questionnaire aimed at focusing their thinking on the problem to be addressed; existing resources or strengths; and change that has already occurred.
- Counselling session: the elements of this session should include setting a context; finding a focus; investigating attempted solutions; investigating constraints; reflecting; giving the client feedback; addressing last-minute issues; assessing communication in the family and family dynamics; and discussing what is next.
- Follow-up: the family is followed up with a letter or phone call approximately three weeks after the session. Another single session may be arranged, or files may be closed if no further intervention is required.

Additionally, Copello and colleagues (2009) found that working with users and families leads to positive substance-related outcomes. They have outlined a brief five-step family-member-focused model that can be delivered in a single session.

- Step 1: Listen non-judgementally to the family member's concerns.
- Step 2: Provide information and education about drug misuse.
- Step 3: Discuss ways of responding to the family member's drug use and associated behaviours.
- Step 4: Explore sources of support for the family.
- Step 5: Arrange further help if needed.

# Level 6: providing counselling (individual and joint) to families

Counselling with families may include joint counselling or separate sessions for the family members, with the purpose decided by the client and family before commencement. Clients with drug-related problems often face complex issues that can lead to alienation from family and social support. Attempting to deal with these issues in isolation can be extremely difficult. Family members can be recruited to be on the client's "team" to act as part of the solution. There are no studies to guide the use of one modality of family therapy over another. The three modes of family therapy for which the most evidence has been collected include functional family therapy (Waldron et al., 2001), multidimensional

family therapy (MDFT) (Liddle et al., 2001), and multisystemic therapy (Henggeler et al., 2002).

Functional family therapy has been shown to be efficacious with high-risk and juvenile-justice-involved youth. It is a highly structured program consisting of several phases. Each phase includes specific goals, assessment foci, specific techniques of intervention, and therapist skills necessary for success. It works first to develop family members' inner strengths and sense of being able to improve their situation. This provides the family with a basis for change and for future functioning that extends beyond the direct support of the therapist and other social systems.

Multidimensional family therapy (MDFT) is a familybased treatment developed for adolescents with drug and behaviour problems and for prevention of early adolescent substance use. The goal is to significantly reduce or eliminate the adolescent's substance use and other problem behaviour, and to improve overall family functioning. MDFT is recognised internationally as amongst the most effective treatments for problems relating to adolescent substance use (e.g. Brannigan et al., 2004; Rigter, Gageldonk & Ketelaars, 2005). Support for its effectiveness in reducing cannabis use comes from two large randomised trials, the first comparing MDFT with adolescent group therapy and multifamily educational intervention (Liddle et al., 2001), the second comparing, among 600 cannabis-dependent adolescents, the effectiveness of MDFT with that of an Adolescent Community Reinforcement Approach and of a range of other interventions, including MET/CBT and community reinforcement (Dennis et al., 2002). Results from the first trial showed improvement among young people in all treatments, with MDFT showing superior improvement over all in relation to drug use (primarily cannabis) and psychosocial functioning more generally, including family function and academic performance. The positive findings suggest that MDFT may be particularly useful for young people with coexisting behavioural problems. In the second trial, all treatment groups showed improvements, and MDFT was not considered the most cost-effective treatment.

For more information about interventions using MDFT, see: Howard A. Liddle (2002), *Multidimensional Family Therapy for Adolescent Cannabis Users* (Cannabis Youth Treatment Series vol. 5), Rockville, MD: SAMHSA. (<a href="http://ncadistore.samhsa.gov/catalog/productdetails.aspx?Productid=15872">http://ncadistore.samhsa.gov/catalog/productdetails.aspx?Productid=15872</a>)

Multisystemic therapy (MST) takes a comprehensive approach to adolescents' difficulties, as it involves the young person and his or her family, peer group, school,

and community. MST has broad application and has been used to treat chronic and violent criminal behaviour; substance abuse; sexual offending; psychiatric emergencies (e.g. homicidal, suicidal, psychotic); child maltreatment; and serious health-care problems, such as poorly controlled Type I diabetes and HIV. A four-year follow-up (n = 118) of a randomised trial comparing MST with usual community services found that self-reported cannabis use did not differ between groups, but biologically confirmed abstinence was significantly higher in the MST group (55% vs 28%) (Henggeler et al., 2002). It is not suggested that all clinicians be trained in these modes of therapy, but clinicians with an interest in family therapy may wish to seek further training in them.

### 8.5 Summary

Recommendations	Evidence
Clinicians with the training and resources to conduct family interventions given suitability of the client's circumstances should do so	Α
Because families are affected by the client's cannabis use, family members should, when possible, be involved in treatment plans	В

### 8.6 References

Brannigan, R., Schackman, B.R., Falco, M., & Millman, R.B. (2004). The quality of highly regarded adolescent substance abuse treatment programs: Results of an in-depth national survey. *Archives of Pediatrics & Adolescent Medicine* 158, 904–909.

Copello, A., Templeton, L., Velleman, R., Orford, J., Patel, A., Moore, L., & Godfrey, C. (2009). The relative efficacy of two primary-care brief interventions for family members affected by the addictive problem of a close relative: A randomised trial. *Addiction* 104, 49–58.

Dennis, M., Titus, J.C., Diamond, G., Donaldson, J., Godley, S.H., Tims, F.M., Webb, C., Kaminer, Y., Babor, T., Roebuck, M.C., Godley, M.D., Hamilton, N., Liddle, H., & Scott, C.K. (2002). The Cannabis Youth Treatment (CYT) experiment: Rationale, study design and analysis plans. *Addiction 97* Suppl 1, 16–34.

Frye, S., Dawe, S., Harnett, P., Kowalenko, S., & Harlen, M. (2008). Supporting the families of young people with problematic drug use. Canberra: Australian National Council on Drugs.

Henggeler, S.W., Clingempeel, W.G., Brondino, M.J., & Pickrel, S.G. (2002). Four-year follow-up of multisystemic therapy with substance-abusing and substance-dependent juvenile offenders. *Journal of the American Academy of Child and Adolescent Psychiatry 41*(7), 868–874.

Liddle, H.A., Dakof, G.A., Parker, K., Diamond, G.S., Barrett, K., & Tejada, M. (2001). Multidimensional Family Therapy for adolescent substance abuse: Results of a randomized clinical trial. *American Journal of Drug & Alcohol Abuse* 27(4), 651–688.

**Liddle, H.A.** (2002). *Multidimensional family therapy for adolescent cannabis users*. Cannabis Youth Treatment Series vol. 5. Rockville, MD: SAMHSA. Available on line: http://ncadistore.samhsa.gov/catalog/productdetails.aspx?Productid=15872

Patterson, J. & Clapp, C. (2004). Working with families. Clinical Treatment Guidelines for Alcohol and Drug Clinicians no. 11. Fitzroy, Victoria: Turning Point Alcohol and Drug Centre Inc.

**Rigter, H., Van Gageldonk, A. & Ketelaars, T.** (2005). *Treatment and other interventions targeting drug use and addiction: State of the art 2004.* Utrecht, the Netherlands: National Drug Monitor.

Waldron, H.B., Slesnick, N., Turner, C.W., Brody, J.L., & Peterson, T.R. (2001). Treatment outcomes for adolescent substance abuse at 4- and 7-month assessments. *Journal of Consulting and Clinical Psychology* 69, 802–813.

# chapter 9: psycho-education and social support

# 9.1 Overview of psycho-education

Psycho-education is a specific form of education that aims to help clients with a problem related to substance use to access clearly and concisely presented facts about a broad range of issues. Psycho-education and self-help material (e.g. books, information pamphlets, computer programs) have been used as an adjunct to face-toface treatment and as a stand-alone intervention since the 1970s (Finfgeld, 2000). Psycho-education should be delivered in a manner consistent with motivational interviewing (MI) principles, which assume that the client can make better choices when equipped with adequate knowledge, self-awareness, and decision-making skills. Research has shown that the more that people are aware of their condition and how it affects their own lives and that of others, the more control they have over their condition (Lincoln, Wilhelm & Nestoriuc, 2007).

Education may be delivered with or without personal contact, and in an individual or group setting. One of the key factors is linking the information with the client's personal experience. Psycho-education provides the opportunity for the development of a good therapeutic relationship and empathic

response to clients' own stories of cannabis use. It can encourage personal exchange of experiences and stimulate hope and reassurance. Psycho-education reinforces the health messages that clients receive from their GP, psychologist, psychiatrist, or counsellor; educates clients; and supports the value of treatment or therapy. Clinicians should deliver psycho-education in a timely and strategic way in order to maximise the positive effect on behavior. It ideally involves the client's family or carers.

# 9.2 Purposes of psycho-education

Different purposes exist for psycho-education. Psycho-education for action has been found to have the greatest effect. (See Table 17.)

Table 17: Summary of psycho-education options

Purpose of psycho-education	Example
Psycho-education for knowledge	Cravings come in waves The time between cravings gets longer as the number of days without use increases
Psycho-education for useful knowledge	Lack of sleep can be a relapse risk
Psycho-education for action	Reduce stress by using breathing technique

It is recommended that all psycho-education be offered in a manner consistent with MI principles, using the following format:

- elicit clients' current understanding of condition/ treatment, and discuss their concerns, such as by addressing myths, fears, sources, and strength of belief
- ask permission to provide further information
- provide information
- elicit new understanding based on the material provided

Psycho-education is more than providing brochures or lectures, especially with clients with comorbid mental health conditions. The effect of both mental illness and drug use upon clients' cognitive, motivational, and attentional functioning requires that clinicians be highly flexible, and at times creative, in the presentation of information (Carey et al., 2000). Psycho-education is a continuing process, with different information being relevant at different times in the course of treatment/recovery.

Psycho-educational materials should be engaging. To do so, they will ideally:

be accurate – including about what we do NOT know!:

- be multi-modal, to grab the recipient's attention using different learning modalities, especially for adult learners;
- use references from popular culture where appropriate;
- use consumer stories;
- be appropriate to the person's gender, age, and educational level, and present the material in novel and engaging formats (e.g. with good layout, in attractive and easy-to-read fonts, using appealing graphics with attention-grabbing colour);
- be positive in tone and visual presentation.
   Consumers are less likely to embrace information with "stop" signs and "no" symbols being used;
- be realistic and honest consumers will discount information if it is exaggerated;
- repeat like all effective promotional messages;
- elicit client-relevant examples;
- consider clients' interests and offer them a chance to tell their story

# 9.3 Stage-dependent psycho-education

Engagement	<ul> <li>assess knowledge about cannabis use and dependence and, if relevant, mental health</li> <li>provide relevant information about effects of cannabis</li> <li>avoid overwhelming them</li> </ul>
Persuasion	<ul><li>provide knowledge of mental illness and cannabis</li><li>use interactive teaching methods</li></ul>
Active treatment	<ul><li> give focused information related to clients' goals</li><li> use interactive teaching methods</li></ul>
Relapse prevention	<ul> <li>provide information related to health, wellbeing, and lifestyle change</li> <li>help them learn how to get information themselves</li> </ul>

Self-help materials are an important addition to treatment interventions, as they may address a portion of the population who do not usually receive treatment. They should be well-distributed to cannabis users and accessible by those with non-English speaking backgrounds and by people with low reading ability. Below is a list of resources available in the cannabis area. (Please note that whilst most resources have been peer-reviewed or have had consumer feedback, they have not been evaluated for their effects on cannabis-use behaviours or treatment outcomes). Before deciding which booklet is most appropriate for your clients, consider their reading age and skills. Some booklets perform best when worked through together with a clinician.

# 9.4 Resource guide

The following is a guide to some of the psycho-educational material available for cannabis. Most of these resources are developed in Australia and are available for download or ordering from the relevant website (see Table 18).

Table 18: Resource guide

Resource		Description and link
What's the deal x 4	quitting?  what's the deal?	A series of easy to read step-by-step guides that include quitting cannabis and information for parents and young people Available from <a href="http://ncpic.org.au">http://ncpic.org.au</a> : What's the deal on quitting? A do-it-yourself guide for cannabis users What's the deal? Cannabis facts for parents What's the deal? Cannabis facts for young people What's the deal? Talking with a young person about cannabis
Mulling it over		Health information for people who use cannabis http://www.mdecc.org.au/resources.htm
Trimming the grass	¥	http://www.mdecc.org.au/resources.htm
Fast facts on cannabis and mental health	mental health camuabis	http://ncpic.org.au/
Fast facts on cannabis	camabis	http://ncpic.org.au/
The mix (alcohol and cannabis)	ALCOHOL & CANABIS	http://ndarc.med.unsw.edu.au/
Cannabis: facts for teens	marijuana: facta for testa	Educational brochures that NIDA publishes on cannabis <a href="http://ncadistore.samhsa.gov/catalogNIDA/">http://ncadistore.samhsa.gov/catalogNIDA/</a>

Resource		Description and link
Cannabis: facts parents need to know	Marriagna Tects Parents Need to Know Agence	Educational brochures that NIDA publishes on cannabis Available in English and Spanish <a href="http://www.drugabuse.gov/MarijBroch/MarijIntro.html">http://www.drugabuse.gov/MarijBroch/MarijIntro.html</a>
A guide to cutting down and stopping cannabis	A SUBJECT TO COLUMN ADDRESS OF THE PARTY OF	11-page booklet  http://www.knowcannabis.org.uk/
Cannabis and your body (leaflet)	Cannabis and your body	http://www.adf.org.au/store/article.asp?ContentID=Cannabisandbody753
Others	What is cannabis? Cannabis and the Cannabis and mer Cannabis potency Cannabis and driv Cannabis and pres Cannabis and agg Cannabis and mot Cannabis and toba Cannabis in the w Cannabis use and Looking after a fric Mixing cannabis a	law intal health  ring endence scribed medications ression civation acco use orkplace reproduction end on cannabis and alcohol eveloping problems with their cannabis use ing people appetite

# 9.5 Self-managed change

The majority of those with alcohol and other drug problems successfully give up or manage their use without treatment. There are now a number of general and cannabis-specific psycho-education and brief intervention materials available in hard copy and online. While few have been rigorously evaluated, below (Table 19) is a list of examples of online psychoeducation links that are commonly used by clinicians.

Table 19: Key sites for online psycho-education

Site	Description
NCPIC www.ncpic.org.au	information for health professionals, families and users
Turning Point online counselling service http://www. counsellingonline. org.au/en/	Counselling Online is a service where you can communicate with a professional clinician about an alcohol- or other drug-related concern, using text-interaction this service is free for anyone seeking help with their own drug use or the drug use of a family member, relative or friend. Counselling Online is available 24 hours a day, 7 days a week, across Australia
Know cannabis http://www.knowcannabis.org.uk/	this website can help you assess cannabis use, its impact on your life and how to make changes
E toke http://www.e-toke. com/info/index.php	cannabis-specific brief assessment and feedback tool designed to reduce cannabis use among college students
Somazone www. somazone.com.au	a website developed by young people for young people. The website provides fast, free, anonymous access to quality assured health information on a range of issues, including alcohol and other drugs, body image, mind health, relationships and sexual health

# 9.6 Social-support or mutual-aid groups

A self-help or mutual-help group is any group that has the aim of providing support, practical help, and care for group members who share a common problem (Baldacchino & Rassool, 2006). Two of the most widely available self-help groups are Marijuana Anonymous (MA) and SMART Recovery. There are many peerrun groups available to service users, however, at alcohol and other drug treatment centres and other community agencies. Whilst these groups have not been evaluated for their effectiveness, they form an important component of social support for some clients and are well accepted by them.

Marijuana Anonymous	http://livingaid.org/maa/
SMART Recovery	www.smartrecoveryaustralia.

Marijuana Anonymous (MA) provides a 12-step program based on the Alcoholics Anonymous program. MA is self-supporting through user contributions and is not affiliated with any religious or secular institution or organisation. The primary purpose is to stay free of marijuana (abstinence-based approach) and to help current users cease.

The SMART Recovery 4-Point Program employs a variety of CBT tools and techniques to help individuals change faulty thinking in order to gain independence from addictive behaviours. By managing the beliefs and emotions that lead them to drink or use drugs, participants are encouraged to learn how to use these techniques as they progress toward achieving a healthy life balance.

Groups are "open", so participants can attend for as long or as little as they like. Sessions provide an opportunity for participants to discuss difficulties, challenges, accomplishments, and successes and to focus on goals.

### 9.7 Summary

Recommendations	Evidence
Psycho-education is a continual process that involves delivery of written or oral material about the harms associated with cannabis use, and should be offered to all clients	В
Clinicians should familiarise themselves with the appropriate print and Internet resources available	В
Clinicians should offer self-help books and details of support groups alongside standard therapy	С

# 9.8 References

**Baldacchino, A. & Rassool, H.** (2006). The self help movement in the addiction field revisited. *Journal of Addictions Nursing* 17, 47–52.

Carey, K.B., Purnine, D.M., Maisto, S.A., Carey, M.P., & Simons, J.S. (2000). Treating substance abuse in the context of severe and persistent mental illness: Clinicians' perspectives. *Journal of Substance Abuse Treatment* 19, 189–198.

**Finfgeld, D.L.** (2000). Therapeutic groups online: The good, the bad, and the unknown. *Issues in Mental Health Nursing* 21, 241–255.

Lincoln, T.M., Wilhelm, K. & Nestoriuc, Y. (2007). Effectiveness of psycho-education for relapse, symptoms, knowledge, adherence and functioning in psychotic disorders: A meta-analysis. *Schizophrenia Research* 96, 232–245.

# chapter 10: treating mental health in cannabis users

A higher proportion of cannabis users than of nonusers have a mental disorder, and higher proportions of those with mental disorders than of those without, use cannabis. This association makes it likely that clients seeking either type of treatment are at higher than average risk for the other disorder. Even very experienced mental health clinicians may fail to recognise a concurrent substance use disorder. Similarly, many clinicians treating substance use disorders struggle to recognise, or respond to, the presence of concurrent mental disorders in their clientele. Early recognition of concurring disorders contributes to the planning, before either condition becomes established, of treatment effective for and suitable to the comorbidity.

#### **10.1 Considerations**

Clinicians should actively and meaningfully assist all people with concurrent disorders to obtain appropriate treatment from within the service system to which they present (the "no wrong door" service system approach). Non-mental health practitioners may need to provide "psychological first aid" to cannabis users, which may include monitoring mental health, providing support and practical assistance, encouraging use of existing social supports, and, on rare occasions, ensuring the client's safety.

When possible, clients should receive integrated treatment of concurrent mental health and substance use disorders. Integrated treatment occurs when a clinician provides treatment for both a client's substance use and mental disorders. Integrated treatment also occurs when separate practitioners (sometimes from separate agencies) work together to formulate and implement an individual treatment plan. This integration needs to continue beyond acute intervention and through recovery by way of formal interaction (Mueser, Birchwood & Copello, 2002).

# 10.2 Mental health problems associated with cannabis

# 10.2.1 Cannabis, psychosis, and schizophrenia

A meta-analysis examining the link between cannabis and psychosis found seven relevant, high-quality studies (Moore et al., 2007). Results consistently showed that cannabis use increased the risk of developing psychosis. The pooled data showed that in people who had ever used cannabis the risk of psychosis increased by 40%. Evidence for a

dose-response relationship between an increasing frequency of cannabis use and risk of psychosis has also emerged. For heavy cannabis users the risk increased by 50–200%. Based upon these data, Moore suggested that approximately 14% of the psychotic episodes noted in young adults in the U.K. would not have occurred if cannabis had not been used.

Cross-sectional national surveys from the U.S., Australia, and The Netherlands found that rates of cannabis use among people with schizophrenia were approximately double those of the general population (Arseneault et al., 2004). Whilst cannabis use roughly doubles the risk of psychosis, the absolute risk is small [increasing from around 7 to 14 cases per 1000 (Saha et al., 2005)].

There is still doubt that cannabis is sufficient to cause schizophrenia that would not otherwise have occurred in its absence, as rates of schizophrenia appear to have remained stable or decreased, despite substantial increases in cannabis use over the past few decades. Cannabis could be considered a "cumulative causal factor", acting in synergy with other factors (genetic or early environmental factors known to be risk factors for schizophrenia, such as obstetric complications) to result in schizophrenia's manifestation. One study looking at biological underpinnings has identified a particular gene (known as COMT Val 158 Met) that may be implicated in the relationship between cannabis use and psychosis (Caspi et al., 2005). This study is yet to be replicated.

Recent clinical and population studies (Moore et al., 2007; Raphael et al., 2005; Degenhardt, Hall & Lynskey, 2001; Arseneault et al., 2004a; D'Souza et al., 2008; Fergusson, Horwood & Swain-Campbell, 2003) may be summarised as follows:

- a number of well-designed longitudinal studies have found that adolescent cannabis use was associated with an increased likelihood of psychotic symptoms
- there is consistent evidence from several large, well-designed longitudinal studies that cannabis precipitates symptoms of psychosis and schizophrenia in people who are vulnerable because of a personal or family history of schizophrenia
- nevertheless, rates of schizophrenia generally appear to have remained stable or declined despite substantial increases in cannabis use

- cannabis may act in synergy with genetic or other environmental factors to result in the manifestation of psychotic symptoms and/or schizophrenia
- one study has identified a gene that may mediate the relationship between cannabis use and schizophrenia

An excellent summary can be found in McLaren, Lemon, Robins, and Mattick's (2008) Cannabis and Mental Health: Put into Context, available from www.ncpic.org.au

#### 10.2.2 Cannabis and depression

A recent analysis of the National Comorbidity Survey (NCS) data set found that a higher risk for having a major depressive episode was associated with greater cannabis use (Chen et al., 2002). Similarly, an earlier study reported that individuals meeting criteria for DSM-IV-TR cannabis abuse or dependence were 6.4 times as likely to meet criteria for major depression than were individuals not meeting disorder criteria (Grant et al., 2005). This finding of elevated rates of depression in cannabis users has been repeated in a number of studies of youth (Rey et al., 2002) and of young adults (Patton et al., 2002), and in international longitudinal cohort samples (Fergusson & Horwood, 1997; Angst, 1996). A dose–response relationship was found in four of five studies, indicating that a higher frequency of cannabis use was related to an increased risk for depression (Moore et al., 2007).

There is mounting evidence of an association between cannabis use and depression that is dose-related, though there is currently insufficient evidence to establish a causal link.

# 10.2.3 Cannabis and anxiety

Whilst there is an elevated rate of anxiety disorders among cannabis users, there is little evidence of a causal link to date (Moore et al., 2007). Only two of seven studies reviewed by Moore and colleagues found a significant association between cannabis use and anxiety independent of potential confounding variables. Due to the complex nature of cannabinoids, there is evidence that cannabis can both relieve and create anxiety, depending on the amounts of THC and CBD (Hall & Solowij, 1998).

# 10.2.4 Long-term cannabis dependence; depression; and anxiety

Over a period, the effects of cannabis dependence can lead to symptoms of depression and anxiety. These symptoms often cease once the client has completed the withdrawal process. If symptoms persist, however, the client should be referred for a full mental health assessment. For some people with depression or anxiety, the withdrawal process increases the symptoms of these mood disorders, and therefore the person is more likely to relapse into cannabis use. This can cause a merry-go-round effect of use, reduction, depression or anxiety, and relapse into use.

# 10.2.5 Cannabis and suicide

A small number of studies have found a relationship between cannabis use and suicide among young people (see Hillman et al., 2000 for a review). It is unclear, however, whether this increased risk is better explained by other risk factors. At this stage, the studies conducted are too heterogeneous to make firm conclusions about the links.

#### 10.2.6 Other mental health issues

Problems of conduct in childhood and early adolescence appear to be associated with the onset of cannabis use and to meet criteria for cannabisuse disorder in a manner consistent with the self-medication hypothesis, although this association is more likely the result of underlying common factors that increase the risks for both disorders (e.g. impulsiveness).

# 10.3 Screening for cannabis use in a mental health setting

Clinicians assessing a cannabis user should be alert to the possibility that the client has a mental illness. For this reason, it is important to screen and re-screen. See Table 21 for examples of validated screening tools.

- all individuals receiving mental health or substance use treatment should be screened or assessed for a concurrent disorder
- routine screening represents an efficient method for services to increase their recognition of concurrent disorders. Screening should not be necessary, however, where comprehensive routine "dual diagnosis" assessment (one assessing both mental health and alcohol and other drug status) is provided
- screening and/or assessment for a concurrent disorder should take place at or near the time of a person's first contact
- screening and assessment should not be attempted when the client is intoxicated, distressed, in pain, in need of emergency treatment, or acutely psychotic
- younger people should receive some level of screening at each contact for a concurrent disorder

Table 20: Validated tools for identifying cannabis use

Tools	Use in population with mental health issues
Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) (WHO ASSIST Working Group 2002)	The World Health Organization (WHO), which developed the ASSIST for use in primary and general medical care settings worldwide, reports that screening questions can be answered by most individuals in around ten minutes
Severity of Dependence Scale (SDS) (Gossop et al., 1995)	The SDS has also been shown to be reliable in mental health patients
Modified Simple Screening	The MSSI-SA is a very slightly modified version of the Simple Screening Instrument for Substance Abuse (SSI-SA) and can be self-administered or administered as an interview in 10 minutes or less The screen has good internal psychometrics and very good sensitivity, specificity, and overall accuracy
Urine drug screen	It can be used as an outcome measure or for confirmation of use

#### **CAUTION:**

Please note that tools such as the SDS may use lower cut-off scores for clients with mental illness, reflecting that they can experience problems with cannabis at lower levels of use than do other clients.

# 10.4 Assessment and treatment of cannabis use in a mental health setting

Due to the high prevalence of mental health issues in cannabis users, it is important that cannabis use be assessed as part of standard assessment procedures. The language of the assessment must be understandable and should communicate confidence and a collaborative approach. The following clinical recommendations are made with regard to the assessment and treatment of cannabis use among people with mental health problems:

- all clients with mental health problems who present in primary care or specialist mental health settings should be screened for cannabis and other drug (including tobacco) use
- clinicians should be alert to the possibility of cannabis use by clients with any mental health conditions, not only those with psychosis

- due to the high prevalence of cannabis use in mental health settings, it is important that any cannabis use be comprehensively assessed as part of standard assessment procedures
- a stepped-care approach, from brief to more intensive interventions, following guidelines developed by Hides et al. (2006), may be helpful
- furthermore, the well-established association between cannabis use and relapse of symptoms in individuals with psychosis (Linszen et al., 1994; Gleeson, 2004) highlights the need to provide continuing monitoring of cannabis use and symptoms of psychosis to detect lapses and to help prevent relapse in this vulnerable population

### **Feedback**

Feedback to individuals with psychosis is helpful in reinforcing that the client's individual story has been heard and in allowing each client to correct any inaccuracies (Prochaska et al., 1993). Graphical feedback, such as a simple ladder or bar chart that compares a client's use with that of others in their age range or in the general population, can allow clients to review and assimilate the information following the session. Feedback can summarise data gathered on the practical aspects of cannabis use, such as on the cost or the time spent procuring, using, and being intoxicated with cannabis, as well as on the relationship between use and relapse patterns, and can be powerful (see worksheet in Chapter 12).

### **Treatment**

Cannabis use has been found to co-exist with a range of mental health symptoms and disorders (a concurrence referred to hereafter as comorbidity). Large-scale epidemiological surveys have found higher rates of psychotic, affective, anxiety, and behavioural disorders among individuals with substance use disorders than in the general population (Degenhardt, Hall & Lynskey, 2001; Farrell et al., 2001; Merikangas et al., 1998). The majority of individuals seen at publically-funded mental health services have psychosis (including schizophrenia), bipolar disorder, or severe personality disorder, especially borderline personality disorder. Though there has been a dearth of studies on the latter, there have been several attempts to develop treatments for cannabis use for the former conditions (Edwards et al., 2006; Barrowclough et al., 2001; Baker et al, 2006; Kavanagh et al., 2002). Recent Australian studies have found cannabis use in individuals with psychosis to be significantly greater than have comparable international studies (Wade et al., 2006; Wade et al., 2007; Hinton, Edwards & Elkins, 2008)

in a similar population of patients with recent-onset psychosis. See Table 21 for an overview of phases of and strategies for treatment.

Studies suggest that cannabis use among people with severe mental disorders is amenable to treatment.

- as a minimum intervention, give advice about quitting or reducing cannabis use and about its effects on mental health symptoms, delivered using MI
- treatment is as outlined in Chapter 6, but includes MET/CBT, which integrates mental health issues with those relating to cannabis use
- treatment of cannabis use in a mental health population does work, and studies show that cannabis consumption can be reduced by 30-50% on average (Wade et al., 2006; Johnsson et al., 2004; Addington & Addington, 2001)
- the earlier the treatment, the better are the outcomes
- discharge planning should include continuing monitoring of cannabis use and, potentially, referral to alcohol and other drug services
- consider the role that cannabis may play in the life of a person with psychosis, especially in cases in which there may be many incentives to keep smoking post-recovery

Table 21: Phases of and strategies for treatment of mental health issues

Phase	Goals	Clinical strategies
1: Entry	Engage  Gain commitment to treatment  Raise the issue of problematic cannabis use	Case formulation Feedback from assessment Exploration of explanatory model of mental health diagnosis Exploration of views of interaction of cannabis and diagnosis Exploration of readiness to change cannabis use Psycho-education: exploration of and problem-solving barriers to future attendance
2: Commitment	Set a goal of reduced or no cannabis use	Motivational Interviewing (MI) Harm reduction Psycho-education about cannabis and mental health diagnosis
3: Goal setting	Reinforce commitment to change Set a goal of reduced use that may include abstinence Develop goal-achievement strategies	MI revisited Goal setting Psycho-education
4: Challenges	Adopt a sound approach to all potential challenges to cannabis-reduction goals	Withdrawal counselling Problem-solving Relapse prevention Psycho-education
5. Relapse prevention	Examine factors that are "rewards" for the short-term achievement and long-term maintenance of reduced/no cannabis use Consider positive lifestyle changes to support cannabis goals	Relapse prevention Cannabis-refusal skills Time management Psycho-education
6. Maintenance	Maintain motivation to a commitment of reduced/no cannabis use Continually consider positive lifestyle change to support cannabis goals	Relapse prevention Coping skills Time management MI revisited Reinforcement of psycho-education
Exit	Conclude episode of care	Reassurance that client can return if required, by mutual agreement, or can be referred to another clinician/service

### **Psychosis**

With respect to early psychosis, consideration should be given to the age and developmental stage of the client, including age at illness onset. You may need to provide assistance with attainment of basic skills (e.g. problem-solving), because normal developmental achievements may have been interrupted by the onset of psychotic illness and/or long-term cannabis use.

Take into account the role and influence of the client's family and social circles and of their attitudes to cannabis and other drug use. As with other substance users, there may be elevated levels of acceptance and use of cannabis in the client's family. Poor insight is common in both disorders; clients may have not initiated help-seeking for psychosis or for cannabis use; and they may need time to understand their need for treatment for each condition. Thus, clinicians should regularly provide feedback from their reassessment of drug use, readiness to change, and mental state, as the clinical picture is complex and frequently in flux.

You need to consider that clients who experience psychosis often face many losses and that these individuals may experience reducing cannabis use as another loss. Changing cannabis use may represent loss of pleasure, of social activity, or of routine, and returning to use may be seen as a sign of returning to usual activities. Such an understanding on the clinician's part can help in engaging.

It is important to explore the cognitive difficulties that can arise from heavy cannabis use, illness course, and medication, and to adapt interventions accordingly. Seize the window of opportunity afforded in the presentation for treatment by assertively offering early treatment.

#### CAUTION

Mental health symptoms can complicate withdrawal, and may lead to overmedication for symptom management. There is even greater likelihood of comorbid nicotine dependence among clients with comorbid psychiatric illness.

There is a well-developed literature showing that quitting tobacco can lead to increased blood levels of antipsychotic medication. Medications should be carefully monitored during withdrawal and cessation. Dose reduction may be needed if side-effects become apparent.

## Psycho-education for comorbidity

Psycho-education for individuals with comorbid mental health and substance use problems is "critical as there is much to learn regarding mental health, substance use and the interaction between them" (Mueser et al., 2002). Clinicians need to equip themselves with knowledge and access to information on the range of disorders that may present in cannabis users and on their treatments. Psycho-educational approaches have been shown to be highly effective in mental disorders (Pekkala & Merinder, 2002). In a recent study with young people with first-episode psychosis who abused cannabis, those receiving 10 sessions of psycho-education reduced their cannabis use and maintained reductions over six months equivalent to those who received integrated motivational interviewing and CBT (Edwards et al., 2006). There are a wide range of well-written resources that have been developed to provide useful information on cannabis and mental health. See Table 22 for details.

Table 22: Resource guide for cannabis and mental health

Resources for professionals		Link
Back to reality (cannabis and psychosis)	Bo Cl C R	http://orygen.org.au/shoppingcategory.asp?Categoryid=21 ISBN 1-920718-17-6 Format: DVD
Cannabis and psychosis: An early psychosis treatment manual	Station Carbon	http://orygen.org.au/shoppingcategory.asp?Categoryid=20 ISBN 1 920718 02 8 Format: manual
Prevention of coexisting mental health and substance use problems	PreventionResearchQuarterly Prevention and early Intervention of coexisting mental health and substance use issues	http://druginfo.adf.org.au/downloads/Prevention_Research_Quarterly/PRQ_o7Nov_Prev_mental_health_sub_use.pdf
What is coexisting mental illness and substance misuse?	Pact sheet  What is consisting mental illness and adoltsone misses?  What is consisting mental illness and adoltsone misses?  A consisting mental illness and adoltsone misses and adoltsone	http://druginfo.adf.org.au/downloads/fact_sheets/FS_5.10_ What_is_coexistant.pdf

Resources for consumers		Links
Cannabis & psychosis fact sheet	Connection and Psychosis Rel design What houses?  The connection of the connection o	http://www.health.vic.gov.au/drugservices/downloads/cannabis_psychosis
Double trouble: Drugs and mental health	BEHARLE	http://www.adf.org.au/store/article.asp?Contentid=product_61211
Cannabis and mental health	DEMO OPEO STATE OF THE PROPERTY OF THE PROPERT	http://druginfo.adf.org.au/druginfo/fact_sheets/cannabis_factsheets/cannabismentalhealth.html
Mind your head	MIND OUR HEAD	http://www.adf.org.au/store/article.asp?Contentid=Mindyour head7551

Resources for consumers		Links
Your guide to: Mental health and alcohol and other drug problems	Total care	http://www.adf.org.au/store/article.asp?Contentid=Yourguidetomentalh735
What young people should know about mental illness and drug use	ck	http://druginfo.adf.org.au/druginfo/fact_sheets/mental_health_substance_use_factsheets/mental_health_substance_use_youngpeople.html

# 10.5 Mental health symptoms in alcohol and drug settings

All specialist alcohol and other drug workers are encouraged to assess and intervene with mental health issues at the non-severe end of the spectrum.

### 10.5.1 Screening

After selecting a single screening instrument (see Table 23), become familiar with that instrument and with its use and scoring. You should be aware that the validity of the screening can be affected by such circumstances as the manner in which instructions

are given; what the client believes about how the information will be used; privacy; trust; and the rapport with the client. It is important to be sensitive to the ways in which culture may influence responses to screening questions and to know that many of the recommended screening instruments are available in languages other than English.

You should have a protocol for assessing individuals who screen positive. This should include a protocol for responding immediately to urgent needs identified in the screening, including suicidal thoughts or levels of substance use that may require medical attention.

Table 23: Tools for detecting mental health symptoms in cannabis users

Tool	Description
Kessler 10 (K10) or Kessler 6 (K6) (Kessler, 2003)	Discriminates cases of serious mental illness from non-cases Screens for general distress in the last 30 days A score of 13 or higher indicates serious mental illness A score of 8–12 indicates an anxiety-mood disorder that does not meet the severity threshold for a diagnosis of serious mental illness
Mental Health Screening Form III (Carroll & McGinley, 2001)	17-item screen that examines lifetime history Initially designed as a rough screening device For clients seeking admission to substance abuse treatment programs The screen can be administered in approximately 15 minutes (positive responses should be followed up by questions regarding the duration, intensity, and concurrence of symptoms. A qualified mental health professional should determine whether a follow-up assessment and treatment recommendations are needed)
The Psychosis Screener (Australian National Survey of Mental Health and Well-Being) (Degenhardt et al., 2005)	Seven-item screener
Modified MINI Screen (MMS) (Sheehan et al., 1997)	22 Yes/No items that screen for anxiety and mood disorders, trauma exposure and PTSD, and non-affective psychoses The MMS can be administered in five to 10 minutes and scored in less than five minutes

For more information on screening for concurring disorders, see: http://www.omh.state.ny.us/omhweb/resources/providers/co\_occurring/adult\_services/screening.html

After screening, all clients should be given feedback about the results. If the screen is **positive**, then a further assessment of the client's mental state is needed. If it is **negative**, then discuss the potential effect of drug use on mental health symptoms and continue to monitor mental health as well as drug use.

#### 10.5.2 Assessment

- a comprehensive assessment by appropriately trained clinicians is warranted for all individuals identified through screening as potentially having comorbidity. The screening processes are the same as those described earlier
- when working in alcohol and other drug settings, also investigate whether the client's mental health is already being addressed by another professional
- consider referral to mental health specialists for high-risk clients and any clients with psychosis or other low-prevalence disorders such as anorexia nervosa or obsessive-compulsive disorder

#### 10.5.3 Treatment

- strive for integrated care where possible
- if you are not able to provide integrated care, strive to adopt parallel communication and processes. This includes regular communication about attendance, medication update, changes in mental state, etc
- you should strive to develop skills in the disorders commonly comorbid with cannabis use, such as anxiety and depression
- motivational interviewing techniques are paramount to establishing and maintaining engagement
- the key behavioural task is to monitor high-risk situations, such as via mood monitoring for depression, suicidality, etc
- relapse into both conditions is common, so relapse prevention should feature prominently in treatment plans
- if symptoms do not improve, then referral or secondary consultation may be required
- you may benefit from including mental health aspects of clients' care in your clinical supervision
- maintain liaison with mental health teams and GP where appropriate
- make referrals for medication to address mental health symptoms
- suicidal clients should be referred to specialist clinicians

# **10.6 Summary**

Recommendations	Evidence
Due to links between cannabis use and mental health, screening for both is recommended	А
Interventions that include MET/CBT /PSYCHO- EDUCATIONAL approaches are effective for individuals with comorbid mental health issues	A
Integrated approach should be provided when possible	В

#### 10.7 References

**Addington, J. & Addington, D.** (2001). Impact of an early psychosis program on substance use. *Psychiatric Rehabilitation Journal* 25, 60–67.

Angst, J. (1996). Comorbidity of mood disorders: A longitudinal prospective study. *British Journal of Psychiatry* Suppl. *30*, 31–37.

Arseneault, L., Cannon, M., Witton, J., & Murray, R. (2004). Cannabis as a potential causal factor in schizophrenia. In D. Castle & R. Murray (eds.), *Marijuana and madness: Psychiatry and neurobiology.* Cambridge: Cambridge University Press, pp. 101–118.

Baker, A., Bucci, S., Lewin, T., Kay-Lambkin, F., Constable, P.M, & Carr, V.J. (2006). Cognitive—behavioural therapy for substance use disorders in people with psychotic disorders: Randomized controlled trial. *British Journal of Psychiatry 188*, 439–448.

Barrowclough, C., Haddock, G., Tarrier, N., Lewis, S.W., Moring, J., O'Brien, R., Schofield, N., & McGovern, J. (2001). Randomized controlled trial of motivational interviewing, cognitive behavior therapy, and family intervention for patients with comorbid schizophrenia and substance use disorders. *American Journal of Psychiatry* 158(10), 1706–1713.

**Carroll, J. & McGinley, J.** (2001). A screening form for identifying mental health problems in alcohol/other drug dependent persons. *Alcoholism Treatment Quarterly* 19(4), 33–47.

Caspi, A., Moffitt, T.E., Cannon, M., McClay, J., Murray, R., Harrington, H., Taylor, A., Arseneault, L., Williams, B., & Braithwaite, A. (2005). Moderation of the effect of adolescent-onset cannabis use on adult psychosis by a functional polymorphism in the catechol-Omethyltransferase gene: Longitudinal evidence of a gene X environment interaction. *Biological Psychiatry 57*, 1117–1127.

Chen, C.Y., Wagner, F.A. & Anthony, J.C. (2002). Cannabis use and the risk of major depressive episode: Epidemiological evidence from the National Comorbidity Survey. *Social Psychiatry and Psychiatric Epidemiology* 37, 199–206.

**Degenhardt, L., Hall, W. & Lynskey, M.** (2001). Alcohol, cannabis and tobacco use among Australians: A comparison of their associations with other drug use and use disorders, affective and anxiety disorders, and psychosis. *Addiction 96*(11), 1603–1614.

Degenhardt, L., Hall, W., Korten, A., & Jablensky, A. (2005). *Use of a brief screening instrument for psychosis: Results of an ROC analysis*. NDARC Technical Report no. 210. Sydney: National Drug and Alcohol Research Centre.

D'Souza, D., Ranganathan, M., Braley, G., Gueorguieva, R., Zimolo, Z., Cooper, T., Perry, E., & Krystal, J. (2008). Blunted psychotomimetic and amnestic effects of Δ-9-tetrahydrocannabinol in frequent users of cannabis. *Neuropsychopharmacology* 33, 2505–2516. Available on line: http://dx.doi.org/10.1038/sj.npp.1301643

Edwards, E., Elkins, K., Hinton, M., Harrigan, S., Donovan, K., Athanasopoulos, O., & McGorry, P.D. (2006). Randomized controlled trial of a cannabisfocused intervention for young people with first-episode psychosis. *Acta Psychiatrica Scandinavica* 114(2), 109–117.

Farrell, M., Howes, S., Bebbington, P., Brugha, T., Jenkins, R., Lewis, G., Marsden, J., Taylore, C., & Meltzer, H. (2001). Nicotine, alcohol and drug dependence and psychiatric comorbidity: Results of a national household survey. *British Journal of Psychiatry* 179, 432–437.

Fergusson, D.M., Horwood, L.J. & Swain-Campbell, N.R. (2003). Cannabis dependence and psychotic symptoms in young people. *Psychological Medicine* 33(1), 15–21.

Fergusson, D.M. & Horwood, L.J. (1997). Early onset cannabis use and psychosocial adjustment in young adults. *Addiction* 92(3), 279–296.

Gleeson, J.F. (2004). The first psychotic relapse: Understanding the risks, and opportunities for prevention. In J.F. Gleeson & P.D. McGorry (eds.), *Psychological intervention in early psychosis: A treatment handbook*. Chichester: Wiley.

Gossop, M., Darke, S., Griffiths, P., Hando, J., Powis, B., Hall, W., & Strang, J. (1995). The Severity of Dependence Scale (SDS): Psychometric properties of the SDS in English and Australian samples of heroin, cocaine and amphetamine users. *Addiction 90*, 607–614.

Grant, B., Stinson, F., Hasin, D., Dawson, D., Chou, S., Ruan, W., & Huang, B. (2005). Prevalence, correlates, and comorbidity of bipolar I disorder and axis I and II disorders: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Clinical Psychiatry* 66(10), 1205–1215.

Hall, W. & Solowij, N. (1998). Adverse effects of cannabis. *Lancet 352*, 1611–1616.

Hides, L., Dawe, S., Kavanagh, D.J., & Young, R.M. (2006). Psychotic symptom and cannabis relapse in recent-onset psychosis. *British Journal of Psychiatry* 189, 137–143.

Hillman, S., Silburn, S., Green A., & Zubrick, R. (2000). Youth suicide in Western Australia involving cannabis and other drugs: A literature review and research report. Perth: Western Australian Drug Abuse Strategy Office.

Hinton, M., Edwards, J. & Elkins, K. (2008). Problematic drug use in young people with first episode psychosis. In S. Allsop & B. Saunders (eds.), Responding to co-occurring mental health and drug disorders. London: IP Communications.

Johnsson, F., Freeman, J., Hinton, M., Powell, L., O'Donnell, J., & Power, P. (2004). Cannabis and psychosis: A clinical audit of the prevalence and persistence of cannabis use in first episode psychosis: Patients attending the Lambeth Early Onset (LEO) service in London. *Schizophrenia Research* 70, 72.

Kavanagh, D., Young, R., White, A., Saunders, J., Shockley, N., Wallis, J., et al. (2002). Start over and survive: A brief intervention for substance misuse in early psychosis. In H. Graham, K.T. Mueser, M. Birchwood, & A. Copello (eds.), Substance misuse in psychosis: Approaches to treatment and service delivery. Chichester, Sussex: Wiley.

Kessler, R.C., Barker, P.R., Colpe, L.J., Epstein, J.F., Gfroerer, J.C., Hiripi, E., Howes, M.J., Normand, S.L.T., Manderscheid, R.W., Walters, E.E., & Zaslavsky, A.M. (2003). Screening for serious mental illness in the general population. *Archives of General Psychiatry* 60(2), 184–189.

**Linszen, D.H., Dingemans, P.M. & Lenoir, M.E.** (1994). Cannabis abuse and the course of recent-onset schizophrenic disorders. *Archives of General Psychiatry 51*, 273.

McLaren, J., Lemon, J., Robins, L., & Mattick, R. (2008). Cannabis and mental health: Put into context. Sydney: National Drug and Alcohol Research Centre. Available on line: <a href="http://ncpic.org.au/assets/downloads/ncpic/news/ncpic-news/new-national-drug-strategy-monograph-series-report-cannabis-and-mental-health-put-into-context.pdf">http://ncpic.org.au/assets/downloads/ncpic/news/ncpic-news/new-national-drug-strategy-monograph-series-report-cannabis-and-mental-health-put-into-context.pdf</a>

Merikangas, K.R., Mehta, R.L., Molnar, B.E., Walters, E.E., Swendsen, J.D., Aguilar-Gaziola, S., Bijl, R., Borges, G., Caraveo-Anduaga, J.J., Dewit, D.J., Kolody, B., Vega, W.A., Wittchen, H.U., & Kessler, R.C. (1998). Comorbidity of substance use disorders with mood and anxiety disorders: Results of the International Consortium in Psychiatric Epidemiology. *Addictive Behaviours* 23(6), 893–907.

Moore, T., Zammit, S., Lingford-Hughes, A., Barnes, T.R.E., Jones, P.B., Burke, M., & Lewis, G. (2007). Cannabis use and risk of psychotic or affective mental health outcomes: A systematic review. *Lancet 370*, 319–328.

Mueser, K.T., Birchwood, M. & Copello, A. (eds.). (2002). Substance misuse in psychosis: Approaches to treatment and service delivery. Chichester, Sussex: Wiley.

Patton, G.C., Coffey, C., Carlin, J.B., Degenhardt, L., Lynskey, M., & Hall, W. (2002). Cannabis use and mental health in young people: Cohort study. *British Medical Journal* 325(7374), 1195–1198. Available on line: http://dx.doi.org/10.1136/bmj.325.7374.1195

Pekkala, E. & Merinder, L. (2002). Psychoeducation for schizophrenia. Cochrane database of systematic reviews 2 (art. no. CD002831). Available on line: http://dx.doi.org/10.1002/14651858.CD002831

Prochaska, J.O., DiClemente, C.C., Velicer, W.F., & Rossi, J.S. (1993). Standardized, individualized, interactive, and personalized self-help programs for smoking cessation. *Health Psychology* 12(5), 399–405.

Raphael, B., Wooding, S., Stevens, G., & Connor, J. (2005). Comorbidity: Cannabis and complexity. *Journal of Psychiatric Practice* 11(3), 161–176.

Rey, J.M., Sawyer, M.G., Raphael, B., Patton, G.C., & Lynskey, M. (2002). Mental health of teenagers who use cannabis: Results of an Australian survey. *British Journal of Psychiatry 180*, 216–221.

Saha, S., Chant, D., Welham J., & McGrath, J. (2005). A systematic review of the prevalence of schizophrenia. *PLoS Medicine 2*, e141.

Sheehan, D.V., Lecrubier, Y., Sheehan, K.H., Janavs, J., Willer, E., Keskiner, A., Schinka, J., Knapp, E., Sheehan, M.F., & Dunbar, G.C. (1997). The validity of the Mini International Neuropsychiatric Interview (MINI) according to the SCID-P and its reliability. *European Psychiatry* 12, 232–241.

Wade, D., Harrigan, S., Edwards, J., Burgess, P., Whelan, G., & McGorry, P. (2006). Course of substance misuse and daily tobacco use in first-episode psychosis. *Schizophrenia Research 81*, 145–150.

Wade, D., Harrigan, S., McGorry, P.D., Burgess, P.M., & Whelan, G. (2007). Impact of severity of substance use disorder on symptomatic and functional outcome in young individuals with first-episode psychosis. *Journal of Clinical Psychiatry 68*(5), 767–774.

WHO ASSIST Working Group. (2002). The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST): Development, reliability and feasibility. *Addiction* 97(9), 1183–1194.

# chapter 11: screening tools

# Severity of Dependence Scale (SDS) – information sheet

The Severity of Dependence Scale (SDS) is a five-item questionnaire that provides a score indicating the severity of dependence on cannabis. Each of the five items is scored on a four-point scale (o-3). The total score is obtained through the addition of the five item ratings. The higher the score, the higher is the level of dependence.

# Score range

Adolescents: SDS score of 4+ may indicate dependence Adults: SDS score of 3+ may indicate dependence

### Screens for

Dependence on cannabis

# Time to complete and score

Less than 1 minute

### Public domain?

Yes

### Can client complete it?

Yes

# Where can I get it?

# http://ncpic.org.au/

http://eib.emcdda.europa.eu/html.cfm/index7343EN.html (generic form that does not specify the drug)

### **Strengths:**

- brief
- very easy to use
- well-known
- useable as an outcome measure

# For further information:

Gossop, M., Darke, S., Griffiths, P., Hando, J., Powis, B., Hall, W., & Strang, J. (1995). The Severity of Dependence Scale (SDS): Psychometric properties of the SDS in English and Australian samples of heroin, cocaine and amphetamine users. *Addiction* 90(5), 607–614.

**Swift, W., Copeland, J. & Hall, W.** (1998). Choosing a diagnostic cut-off for cannabis dependence. *Addiction 93*, 1681–1692.

Martin, G., Copeland, J., Gates, P., & Gilmore, S. (2006). The Severity of Dependence Scale (SDS) in an adolescent population of cannabis users: Reliability, validity and diagnostic cut-off. *Drug and Alcohol Dependence* 83, 90–93.

# **Severity of Dependence Scale (SDS)**

Over the last three months:

1.	Did you	ever think	your use	of cannabis	was out of contro	ol?
----	---------	------------	----------	-------------	-------------------	-----

Never or almost never	0
Sometimes	1
Often	2
Always or nearly always	3

# 2. Did the prospect of missing a smoke make you very anxious or worried?

Never or almost never	0
Sometimes	1
Often	2
Always or nearly always	3

# 3. Did you worry about your use of cannabis?

Not at all	0
A little	1
Quite a lot	2
A great deal	3

# 4. Did you wish you could stop?

Never or almost never	0
Sometimes	1
Often	2
Always or nearly always	3

# 5. How difficult would you find it to stop or go without?

Not difficult	0
Quite difficult	1
Very difficult	2
Impossible	3

SDS score / 15

#### **K10** – information sheet

The K10 is a screening tool that can also be used as a rating scale/outcome measure.

The K10 was primarily designed to detect highprevalence mental disorders, but there is also an argument that high K10 scores may be an indicator of possible serious mental illness.

The K10 is now in widespread Australian and international use – for example, as a Victorian Service Coordination Tool, as a NSW mental health routine outcome measure, and by organisations such as the Armed Forces and Beyond Blue and by doctors in general practice. The K10 was used in the 1997 Australian National Survey of Mental Health and Wellbeing.

### **Score Range**

K10 score	Inferred risk of anxiety or depressive disorder	SCT K10 version recommended responses
10 to 15	Low or no risk	-
16 to 29	Medium risk	Refer for primary-care mental health assessment
30 to 50	High risk	Refer for specialist mental health assessment

### Screens for

Distress

### Time to complete and score

10 items: two minutes

### Can client complete it?

Yes. The K10 can also be interviewer-administered to people with poor reading ability.

### Where can I get it?

Service Coordination Tool Templates (SCTT) version: <a href="http://www.health.vic.gov.au/pcps/downloads/coordination/tool\_profile\_psychosocial\_mayo2.pdf">http://www.pcg.au/pcps/downloads/coordination/tool\_profile\_psychosocial\_mayo2.pdf</a>
Online electronic version and scoring: <a href="http://www.beyondblue.org.au/index.aspx?Link\_id=1.237">http://www.beyondblue.org.au/index.aspx?Link\_id=1.237</a>

# Public domain?

Yes

### Strengths:

- brief
- very easy to use
- well-known
- possible for client to complete
- (SCTT version) inclusive of graduated guidelines about need for mental health assessment
- able to be used as an outcome measure

#### Possible limitations:

- as a non-specific measure of psychological distress only, it still requires clinician judgment as to whether a person needs mental health treatment
- most specialist mental health services are oriented primarily toward serious mental illness, in which the K10 is less sensitive

#### **General information**

About 13% of the adult population, and about one in four patients seen in primary care, will score 20 or over. This is a screening instrument, and practitioners should make a clinical judgement as to whether a person needs treatment. Scores usually decline with effective treatment. Patients whose scores remain above 24 after treatment should be reviewed, with specialist referral considered.

### For further information

Andrews, G. & Slade, T. (2001). Interpreting scores on the Kessler Psychological Distress Scale (K10). *Australian and New Zealand Journal of Public Health* 25(6), 494–497.

Croton, G. (2007). Screening for and assessment of cooccurring substance use and mental health disorders by alcohol & other drug and mental health services.

Victorian Dual Diagnosis Initiative Advisory Group.

Available on line: <a href="http://www.wanada.org.au/files/comorbid/ScreeingAndAssessmentCo-occurringSubsUseandMHDisordersbyAODandMHServicesVICDDI.pdf">http://www.wanada.org.au/files/comorbid/ScreeingAndAssessmentCo-occurringSubsUseandMHDisordersbyAODandMHServicesVICDDI.pdf</a>

Kessler, R., Andrews, G., Colpe, L., Hiripi, E., Mroczek, D., Normand, S., Walters, E., & Zaslavsky, A. (2002). Short screening scales to monitor population prevalences and trends in nonspecific psychological distress. *Psychological Medicine* 32(6), 959–976.

Furukawa, T.A., Kessler, R., Slade, T., & Andrews, G. (2003). The performance of the K6 and K10 screening scales for psychological distress in the Australian National Survey of Mental Health and Well-Being. *Psychological Medicine* 33(2), 357–362.

# **Kessler 10 (K10)**

For all questions, please fill in the appropriate response circle.

In the past 4 weeks:	None of the time	A little of the time	Some of the time	Most of the time	All of the time
<ol> <li>About how often did you feel tired out for no good reason?</li> </ol>	0	0	0	0	0
2. About how often did you feel nervous?		0	0	0	$\bigcirc$
3. About how often did you feel so nervous that nothing could calm you down?		0	0		$\bigcirc$
4. About how often did you feel hopeless?		0	0	0	0
5. About how often did you feel restless or fidgety?		0	0		$\bigcirc$
6. About how often did you feel so restless you could not sit still?		0	0		0
7. About how often did you feel depressed?		0	0		
8. About how often did you feel that everything is an effort?		0	0	0	0
9. About how often did you feel so sad that nothing could cheer you up?	0	0	0	0	0
10. About how often did you feel worthless?		0	0	0	0

Source: **Kessler, R.C., Andrews, G., Colpe, L.J., Hiripi, E., Mroczek, D.K., Normand S.L.T., et al.** (2002). Short screening scales to monitor population prevalences and trends in nonspecific psychological distress. *Psychological Medicine* 32(6), 959–976.

# The Modified Simple Screening Instrument for Substance Abuse (MSSI-SA) – information sheet

### Screens for

Substance consumption, preoccupation and loss of control, adverse consequences, problem recognition, and tolerance withdrawal.

### Time to complete and score

Two minutes

### Can client complete it?

Yes

### Where can I get it?

http://www.nyc.gov/html/doh/html/qi/qi\_samhpriority.shtml

### Public domain?

Yes

# Strengths

- brief
- client- or clinician-completed

### Administration

The MSSI-SA can be administered either in the form of a clinical interview or as a self-administered test. In order to minimise clinical or administrative burden, we recommend that providers give individuals the self-administered form.

# Questionnaire

The screen contains 16 questions. The individual's name and the date the form is completed should be entered on the top. Questions 1–13 ask about the previous six months, and questions 14–16 ask about lifetime experience.

### Scoring

Although the MSSI-SA is a 16-item scale, only 14 questions are scored. The total possible score ranges from 0 to 14. Neither question 1a or 1b nor question 15 is scored. In both instances, "yes" responses provide important background information, but it is too general to be useful for scoring. To the remaining questions, the number of "yes" answers is assigned one point. Any tick for question 5 counts as a "yes" and should be added to the score; but even if there are multiple checkmarks for question 5, only one point is assigned.

Score	Degree of risk for substance abuse
0-1	None to low
2-3	Minimal
<b>&gt;</b> 4	Moderate to high: indicates need for
	further assessment

### Interpretation

The currently recommended interpretation is that a score of 4 or more indicates moderate to high degree of risk for alcohol and other drug abuse.

# Modified Simple Screening Instrument for Substance Abuse (MSSI-SA) self-administered form

Name:	
Date:	

**Directions:** The questions that follow are about your use of alcohol and other drugs, including prescription and over-the-counter medication/drugs. Your answers will be kept private. Mark the response that best fits for you. Answer the questions in terms of your experiences in the past six months. Filling out this form assists us in identifying your needs and providing you with services. Your answers on this form will not exclude you from services, care, or treatment at this program.

# During the last six months...

	YES	NO
1a. Have you used alcohol or other drugs (such as wine, beer, hard liquor, pot, coke, heroin or other opiates, uppers, downers, hallucinogens, or inhalants)?		
1b. Have you used prescription or over-the-counter medication/drugs (such as sleeping pills, pain killers, sedatives, or anti-anxiety medication like Valium, Xanax, or Ativan)?		
2. Have you felt that you use too much alcohol or other drugs (other drugs also include prescription or over-the-counter medication more than recommended)?		
3. Have you tried to cut down or quit drinking or using alcohol or other drugs?		
4. Have you gone to anyone for help because of your drinking or drug use (such as Alcoholics Anonymous, Narcotics Anonymous, clinicians, or a treatment program)?		
5. Have you had any health problems? Please tick if you have:  Had blackouts or other periods of memory loss Injured your head after drinking or using drugs Had convulsions or delirium tremens ("DTs") Had hepatitis or other liver problems Felt sick, shaky, or depressed when you stopped Felt "coke bugs" or a crawling feeling under the skin after you stopped using drugs Been injured after drinking or using Used needles to shoot drugs		
6. Has drinking or other drug use caused problems between you and your family or friends?		
7. Has your drinking or other drug use caused problems at school, or at work?		
8. Have you been arrested or had other legal problems (such as bouncing bad checks, driving while intoxicated, theft, or drug possession)?		
9. Have you lost your temper or gotten into arguments or fights while drinking or using other drugs?		
10. Are you needing to drink or use drugs more and more to get the effect you want?		
11. Do you spend a lot of time thinking about or trying to get alcohol or other drugs?		
12. When drinking or using drugs, are you more likely to do something you wouldn't normally do, such as break rules, break laws, sell things that are important to you, or have unprotected sex with someone?		
13. Do you feel bad or guilty about your drinking or drug use?		

# The next questions are about your lifetime experiences.

	YES	NO
14. Have you ever had a drinking or other drug problem?		
15. Have any of your family members ever had a drinking or drug problem?		
16. Do you feel that you have a drinking or drug problem now?		

# **Psychosis Screener – information sheet**

### Score range

Score of 1 or more provides a liberal definition of psychosis

#### Screens for

(using elements of the Composite International Diagnostic Interview [CIDI]) the presence of characteristic psychotic symptoms

### Time to complete and score

One minute

### Can client complete it?

No

# Where can I get it?

**Degenhardt, L., Hall, W., Korten, A., & Jablensky, A.** (2005). *Use of a Brief Screening Instrument for Psychosis: Results of an ROC analysis.* NDARC Technical Report no. 210. Sydney: National Drug and Alcohol Research Centre.

#### Public domain?

Yes

# Strengths:

- brief
- · good sensitivity and specificity for detecting psychosis in clinical and non clinical populations

### **General information**

The first six items cover the following features of psychotic disorders: delusions of control, thought interference, and passivity (Question 1 and 1a); delusions of reference or persecution (Question 2 and 2a); and grandiose delusions (Question 3 and 3a).

# **Psychosis screener**

- 1. In the past 12 months, have you felt that your thoughts were being directly interfered with or controlled by another person?
- 1a. Did it come about in a way that many people would find hard to believe, for instance through telepathy?
- 2. In the past 12 months, have you had a feeling that people were too interested in you?
- 2a. In the past 12 months, have you had a feeling that things were arranged so as to have a special meaning for you, or even that harm might come to you?
- 3. Do you have any special powers that most people lack?
- 3a. Do you belong to a group of people who also have these special powers?
- 4. Has a doctor ever told you that you may have schizophrenia?

# Mental health Screening Form - information sheet

This is a (17 item screen) lifetime mental health history. Questions 1–4 are about client's history of psychiatric treatment. Each of questions 5–17 is associated with a particular mental health diagnosis. A positive response to any of these items suggests the need for more-intensive assessment or consultation with a mental health professional.

### Time to complete and score

About 10 minutes

### Can client complete it?

Yes (not scoring)

### Where can I get it?

Versions available at:

http://www.asapnys.org/Resources/mhscreen.pdf

http://pathwayscourses.samhsa.gov/bully/pdfs\_bully/bully\_supps\_pg4o.pdf

Connecticut Department of Mental Health and Addiction Services: <a href="http://www.dmhas.state.ct.us/cosig">http://www.dmhas.state.ct.us/cosig</a>. htm#screening

(English and Spanish versions are paired with Simple Screening Instrument for Alcohol and Other Drugs)

### Public domain?

Yes

### Reference:

**Croton, G.** (2007). Screening for and assessment of co-occurring substance use and mental health disorders by alcohol & other drug and mental health services. Victorian Dual Diagnosis Initiative Advisory Group. Available on line: <a href="http://www.wanada.org.au/files/comorbid/ScreeingAndAssessmentCo-occurringSubsUseandMHDisordersbyA">http://www.wanada.org.au/files/comorbid/ScreeingAndAssessmentCo-occurringSubsUseandMHDisordersbyA</a> ODandMHServicesVICDDI.pdf

# Mental health screening form III

Instructions: In this program, we help people with all their problems, not just their addictions. This commitment includes helping people with emotional problems. Our staff is ready to help you to deal with any emotional problems you may have, but we can do this only if we are aware of the problems. Any information you provide to us on this form will be kept in strict confidence. It will not be released to any outside person or agency without your permission. If you do not know how to answer these questions, ask the staff member giving you this form for guidance. Please note, each item refers to your *entire life history*, not just your current situation, this is why each question begins "Have you ever ...."

1) Have you ever talked to a psychiatrist, psychologist, therapist, social worker, or counsellor about an emotional problem?	YES	NO
2) Have you ever felt you needed help with your emotional problems, or have you had people tell you that you should get help for your emotional problems?	YES	NO
3) Have you ever been advised to take medication for anxiety, depression, hearing voices, or for any other emotional problem?	YES	NO
4) Have you ever been seen in a psychiatric emergency room or been hospitalised for psychiatric reasons?	YES	NO
5) Have you ever heard voices no one else could hear or seen objects or things which others could not see?	YES	NO
6) a) Have you ever been depressed for weeks at a time, lost interest or pleasure in most activities, had trouble concentrating and making decisions, or thought about killing yourself?	YES	NO
b) Did you ever attempt to kill yourself?	YES	NO
7) Have you ever had nightmares or flashbacks as a result of being involved in some traumatic/ terrible event? For example, warfare, gang fights, fire, domestic violence, rape, incest, car accident, being shot or stabbed?	YES	NO
8) Have you ever experienced any strong fears – for example, of heights, insects, animals, dirt, attending social events, being in a crowd, being alone, being in places where it may be hard to escape or get help?	YES	NO
9) Have you ever given in to an aggressive urge or impulse, on more than one occasion, that resulted in serious harm to others or led to the destruction of property?	YES	NO
10) Have you ever felt that people had something against you, without them necessarily saying so, or that someone or some group may be trying to influence your thoughts or behaviour?	YES	NO
11) Have you ever experienced any emotional problems associated with your sexual interests, your sexual activities, or your choice of sexual partner?	YES	NO
12) Was there ever a period in your life when you spent a lot of time thinking and worrying about gaining weight, becoming fat, or controlling your eating – for example, by repeatedly dieting or fasting, engaging in much exercise to compensate for binge eating, taking enemas, or forcing yourself to throw up?	YES	NO
13) Have you ever had a period of time when you were so full of energy and your ideas came very rapidly, when you talked nearly non-stop, when you moved quickly from one activity to another, when you needed little sleep, and believed you could do almost anything?	YES	NO
14) Have you ever had spells or attacks when you suddenly felt anxious, frightened, uneasy to the extent that you began sweating, your heart began to beat rapidly, you were shaking or trembling, your stomach was upset, you felt dizzy or unsteady, as if you would faint?	YES	NO
15) Have you ever had a persistent, lasting thought or impulse to do something over and over that caused you considerable distress and interfered with normal routines, work, or your social relations? Examples would include repeatedly counting things, checking and rechecking on things you had done, washing and rewashing your hands, praying, or maintaining a very rigid schedule of daily activities from which you could not deviate.	YES	NO
16) Have you ever lost considerable sums of money through gambling or had problems at work, in school, with your family and friends as a result of your gambling?	YES	NO
17) Have you ever been told by teachers, guidance counsellors, or others that you have a special learning problem?	YES	NO

Print client's name:		
Program to which clie	nt will be assigned:	
Name of admissions of	counsellor:	
Date:		
Reviewer's comments	:	
Total score:	(each yes = 1 pt.)	

Source: Carroll, J. & McGinley, J. (2001). A screening form for identifying mental health problems in alcohol/other drug dependent persons. *Alcoholism Treatment Quarterly* 19(4), 33–47.

# Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) – information sheet

#### Screens for

- substances ever used (lifetime use)
- substances used in past three months
- problems related to substance use
- risk of harm (current or future) and dependence
- intravenous drug use

# Time to complete and score

An experienced clinician can conduct an ASSIST screen and deliver the integrated brief intervention in 10 to 20 minutes

### Can client complete it?

No. This tool is clinician-administered.

# Where can I get it?

http://www.who.int/substance\_abuse/activities/assist/en/index.html

(Versions in English, German, Hindi, Portuguese) Manual: ASSIST: Guidelines for Use in Primary Care Manual: Brief Intervention for Substance Use: A Manual

for Use in Primary Care

Manual: Self-Help Strategies for Cutting Down or

Stopping Substance Use: A Guide

(Assist is not produced here due to its length)

### Public domain?

Yes

### The ASSIST can:

- warn people of their risk of developing problems related to their substance use
- provide an opportunity to start a discussion about substance use
- identify substance use as a contributing factor to the presenting illness
- be linked to a brief intervention to help high-risk substance users to cut down or stop their drug use and avoid its harmful consequences

# The ASSIST can distinguish between three main groups:

- low-risk substance users or abstainers
- those whose patterns of use put them at risk of problems or who have already developed problems or are at risk of developing dependence
- those who are dependent on a substance

# Strengths:

- it indicates both likely abuse and dependence
- it generates some assessment information
- it has a linked brief intervention that is likely to be effective for people with problematic or risky substance use (rather than dependence)

### Possible limitations:

it requires some concentrated effort to incorporate into routine practice

# **Cannabis Problems Questionnaire - information sheet**

# Screens for

- general measure of cannabis-related problems
- · modified from the Alcohol Problems Questionnaire to measure cannabis-related problems

### Time to complete and score

One to two minutes

# Can client complete it?

Yes

# Where can I get it?

http://www.ncpic.org.au

# Public domain?

Yes

# Strengths:

- brief
- simple
- available in adolescent and adult versions
- both versions include optional additional questions for more-comprehensive assessment

### **Further information:**

**Copeland, J., Gilmore, S., Gates, P., & Swift, W.** (2005). The Cannabis Problems Questionnaire: Factor, structure, reliability and validity. *Drug and Alcohol Dependence 80*, 313–319.

Martin, G., Copeland, J., Gilmour, S., & Swift, W. (2006). The Adolescent Cannabis Problems Questionnaire: Psychometric properties. *Addictive Behaviors* 31, 2238–2248.

# Cannabis Problems Questionnaire (Adult)®

All the questions apply to your **experiences from smoking cannabis** in the last three months.

Please answer all the questions by ticking yes or no.

In	the last three months:	Yes	No
1.	Have you tended to smoke more on your own than you used to?		
2.	Have you worried about meeting people you don't know when stoned?		
3.	Have you spent more time with smoking friends than with other kinds of friends?		
4.	Have your friends criticised you for smoking too much?		
5.	Have you sold any of your belongings to buy cannabis?		
6.	Do you find yourself making excuses about money?		
7.	Have you been in trouble with the police due to your smoking?		
8.	Have you been physically sick after smoking?		
9.	Have you passed out after a smoking session?		
10	. Have you had pains in your chest or lungs after a smoking session?		
11	. Have you felt paranoid after a smoking session?		
12	. Have you been neglecting yourself physically?		
13	. Have you failed to wash for several days at a time?		
14	. Have you felt depressed for more than a week?		
15	. Have you been so depressed you felt like doing away with yourself?		
16	. Have you given up recreational activities you once enjoyed for smoking?		
17	. Do you find it hard to get the same enjoyment from your usual interests?		
18	. Has your general health been poorer than usual?		
19	. Have you felt more antisocial after smoking?		
20	Have you been concerned about a lack of motivation ?		
21	. Have you worried about feelings of personal isolation or detachment?		
22	. Do you usually have a smoke in the morning, to get yourself going?		

# Cannabis Problems Qusetionnaire - Adolescent (CPQ-A)

- We would like to find out if you have experienced any of the difficulties that other people who use cannabis sometimes complain of.
- Read each question carefully and answer either YES or NO by putting a tick in the appropriate place.
- Some questions specifically ask about problems associated with using cannabis, while others ask about general problems that may have occurred.

Please answer all the questions that apply to you. All the questions apply to your experiences in the last three months.

# **Core CPQ-A items**

In	the last three months:	Yes	No
1.	Have you tended to smoke more on your own than you used to?		
2.	Have you worried about meeting people you don't know when you are stoned?		
3.	Have you spent more time with smoking friends than other kinds of friends?		
4.	Have your friends criticised you for smoking too much?		
5.	Have you had any debts?		
6.	Have you pawned any of your belongings to buy cannabis?		
7.	Have you found yourself making excuses about money?		
8.	Have you found yourself worried about the amount of money you have been spending on cannabis?		
9.	Have you been caught out lying about money?		
10	. Have you been in trouble with the police due to your smoking?		
11.	Have you been physically sick after smoking?		
12	. Have you passed out after a smoking session?		
13	. Have you had pains in your chest or lungs after a smoking session?		
14	. Have you had a persistent chest infection or cough?		
15	. Have you felt paranoid or antisocial after a smoking session?		
16	. Have you lost any weight without trying to?		
17.	Have you been neglecting yourself physically?		
18	. Have you felt depressed for more than a week?		
19	. Have you felt so depressed you felt like doing away with yourself?		
20	. Have you given up any activities you once enjoyed because of smoking?		
21	. Have you had less energy than usual?		
22	. Have you found it hard to get the same enjoyment from your usual interests?		
23	. Has your general health been poorer than usual?		
24	. Have you worried about getting out of touch with friends or family?		
25	. Have you been concerned about a lack of motivation?		
26	. Have you felt less able to concentrate than usual?		
27	. Have you worried about feelings of personal isolation or detachment?		

# **Additional CPQ-A Items**

-	ou have lived with a parent (or guardian) in the past three months, answer these erwise, go to question 33.	e questions.	
28.	Do your parent(s) use cannabis on a regular basis?		
29.	Have your parent(s) complained about your smoking		
30.	Have your parent(s) tried to stop you from having a smoke?		
31.	Have you argued with them about your smoking?		
32.	Have you tried to avoid your parents(s) after you have been smoking?		
-	ou have had any regular boyfriend(s)/girlfriend(s)/partner(s) in the past three m stions. Otherwise, go to question 38.	onths, answer t	hese
Thir	king about the partner that you spent the most time with over the past 3 months:		
33.	Does he/she use cannabis on a regular basis?		
34.	Has he/she complained about your smoking?		
35.	Have you argued with him/her about smoking?		
36.	Has he/she threatened to leave you because of your smoking?		
37.	Have you avoided him/her after you have been smoking?		
-	ou have been enrolled in school or any courses of study in the last three months stions. Otherwise, go to question 47.	s, answer these	
38.	Have you been less interested or motivated in schoolwork/study?		
39.	Have you been unable to attend classes because of smoking?		
40.	Have your school/course marks dropped?		
41.	Have you gone to classes stoned?		
42.	Have you been less able to concentrate on your schoolwork/study?		
43.	Have you smoked on school premises?		
44.	Have you been unable to complete homework because of your smoking?		
45.	Have you had complaints from teachers about your work?		
46.	Have you been disciplined or suspended from school because of cannabis?		
If yo	ou have been employed, either part-time or full-time, in the past three months, a	nswer these que	estions
47.	Have you found your work less interesting than you used to?		
48.	Have you been unable to arrive on time for work due to your smoking?		
49.	Have you missed a whole day at work after a smoking session?		
50.	Have you been less able to do your job because of smoking?		
51.	Have you gone to work stoned?		
52.	Has anyone at work complained about your being late or absent?		
53.	Have you had any formal warnings from your employers?		
54.	Have you been suspended or dismissed from work?		
55.	Have you had any accidents at work after smoking?		

# **Cannabis Withdrawal Checklist**

# - information sheet

# Screens for

Cannabis-related withdrawal symptoms

# Time to complete and score

One to two minutes

# Can client complete it?

Yes

# Where can I get it?

**Budney, A.J., Novy, P. & Hughes, J.R.** (1999). Marijuana withdrawal among adults seeking treatment for marijuana dependence. *Addiction* 94, 1311–1322.

### Public domain?

Yes

# Strengths:

- brief
- simple
- can be used to track symptoms weekly or daily

# **Limitations:**

reliability and validity data unavailable

# **Cannabis Withdrawal Checklist**

N	a	n	1	e	
N	а	n	1	е	

Date: Day:

Please answer based on your experience each day for the first five days of your recent quit attempt.

		none	mild	moderate	severe
1)	Shakiness/tremulousness	0	1	2	3
2)	Depressed mood	0	1	2	3
3)	Decreased appetite	0	1	2	3
4)	Increased appetite	0	1	2	3
5)	Nausea or stomach pains	0	1	2	3
6)	Irritability	0	1	2	3
7)	Trouble sleeping (insomnia)	0	1	2	3
8)	Oversleeping (hypersomnia)	0	1	2	3
8)	Sweating	0	1	2	3
9)	Craving to smoke cannabis	0	1	2	3
10)	Restlessness	0	1	2	3
11)	Nervousness/anxiety	0	1	2	3
12)	Increased anger or aggression	0	1	2	3
13)	Headaches	0	1	2	3
14)	Strange/wild dreams	0	1	2	3
15)	Fatigue/tiredness/yawning	0	1	2	3
16)	Trouble concentrating	0	1	2	3
17)	Chills	0	1	2	3

Source: **Budney, A.J., Novy, P. & Hughes, J.R.** (1999). Marijuana withdrawal among adults seeking treatment for marijuana dependence . *Addiction* 94, 1311–1322.

# Cannabis Use Problems Identification Test (CUPIT) – information Sheet

### Screens for

- cannabis use in past 12 months (frequency, intensity)
- · cannabis use in past three months
- cannabis-induced problems
- risk of harm (current or 12-month) and dependence

### Time to complete and score

Approximately eight to 10 minutes

### Can client complete it?

Yes. The CUPIT can be self- or other-administered

### Where can I get it?

http://www.ncpic.org.au

#### Public domain?

Yes

### The CUPIT can:

- raise cannabis users' awareness of their risk of developing problems related to their cannabis use
- identify cannabis use as contributing to, or as the cause of, users' presenting illness, complaints, or social problems
- be linked to a brief intervention to help high-risk cannabis users to cut down or stop their cannabis use in order to avoid or reduce its harmful consequences

# The CUPIT can distinguish between three main groups:

- currently low-risk cannabis users
- those whose patterns of cannabis use renders them vulnerable to developing problems in the future (at risk), or who have already developed problems and are at risk of developing fullblown dependence (abuse, pre-clinical stage, or "diagnostic orphans")
- those who are dependent on cannabis

### Strengths

- · it is simple and brief
- interviewers require minimal "training"
- its major strength is the ability to detect users currently with cannabis-use disorder and those heading toward developing it

#### **General information**

The original CUPIT developmental analyses showed that a cut-off point of 20 (of a possible 82) was statistically optimal (89% sensitivity, 76% specificity, 98% PPV) in the combined adolescent—adult community sample. A more liberal cut-off point of 16 (95% sensitivity, 53% specificity, 96% PPV) performed better, however, in capturing a greater number of the pre-clinical ("diagnostic orphans") users, and an even more liberal cut-off point of 12 (98% sensitivity, 35% specificity, 95% PPV) was most sensitive in the sample.

### Scoring

A simple score plan applies:

Item 1 scores from 1 to 8
Item 2 scores from 0 to 8
Item 3 scores from 1 to 6
Item 4 scores from 0 to 6
Item 5 scores from 0 to 5
Item 6 scores from 0 to 4
Item 7 scores from 1 to 9
Items 8 to 16 score from 0 to 4 \*

\*Item 9 is reverse scored.

3. How many times would you use cannabis on a typical day when you were using? (Note:

once

\_\_\_ twice

☐ 3-4 times

 $\Box$  5–6 times

☐ 7-9 times

at least one hour between each new "use")

# **Cannabis Use Problems Identification Test** (CUPIT)

Some people can use cannabis without developing any serious problems. Others can experience health problems, or other kinds of problems. If you answer the questions below, it can help you to work out if you are having any problems with cannabis. There are no right or wrong answers. If you have any difficulties, ask yo

your counsellor for help.			☐ 10 or more time			
	For each question, tick $oxtimes$ the answer closest to your cannabis use			How often have you used cannabis first thing in the morning?		
0١	Over the past 12 months			never once or twice		
1.	On how many days have you used cannabis during the past 12 months?			less than monthly monthly		
(If there was no pattern to your cannabis use, please make your <b>best estimate</b> .)			<ul><li>☐ one day a week</li><li>☐ several days a week</li><li>☐ daily/always</li></ul>			
	☐ 1–6 days ☐ 7–12 days	(less than one day a month) (an average pattern of one day a month)	Ov	er the past 12 months		
	☐ 13−36 days	(an average pattern of 2–3 days a month)	5.	How much of the average day do you spend/or feel stoned?		
	☐ 37-52 days	(an average pattern of one day a week)		o hours 1-2 hours		
	☐ 53−104 days	(an average pattern of 2 days a week)		3–4 hours  5–6 hours		
	up to 208 days	(an average pattern of 3-4 days a week)		7–8 hours 9 or more hours		
	up to 312 days	(an average pattern of 5–6 days a week)	6.	How difficult do you think you would find it to		
	up to 365 days	(daily/most days)		stop using or go without cannabis altogether?		
2.	Now please think about your recent cannabis use.  On how many days have you used cannabis over the past three months (90 days)?		<ul> <li>□ not at all difficult</li> <li>□ a bit difficult</li> <li>□ quite difficult</li> <li>□ very difficult</li> <li>□ impossible</li> </ul>			
	no days 1-2 days	(less than one day a month)	7	What was the longest time you went without		
	3–4 days	(an average pattern of one day a month)	/•	using cannabis?  6 months or longer		
	5-9 days	(an average pattern of 2–3 days a month)		3–5 months  1–2 months		
	☐ 10−15 days	(an average pattern of one day a week)		2–3 weeks one week		
	27-52 days	(an average pattern of 3-4 days a week)		☐ 4-6 days ☐ 2-3 days		
	☐ 53-78 days	(an average pattern of 5–6 days a week)		one day no days at all		
	☐ 79−90 days	(daily/most days)		•		

8. Have you felt that you needed cannabis?  never sometimes quite often very often always/all the time	14. Has anything you had planned, or were expected to do, not happened after using cannabis (e.g., a family outing, chores, taking care of children, homework, an assignment, an appointment, a job interview, training, attending school or work, etc.)?
9. Have you been able to stop using cannabis when you wanted to?  never/at no time sometimes (not often) quite often (half the time)	sometimes quite often very often always/all the time  15. Have you had problems concentrating and
very often (usually) always/all the time  10. Have you found it difficult to get through a d	remembering things?
without using cannabis?  never sometimes quite often very often always/all the time	quite often quite often very often always/all the time  16. Did you ever use cannabis after you had decided not to? never
11. Did your use of cannabis ever interfere with (get in the way of) your work at school, your job, or your home life?  never sometimes quite often very often always/all the time	
12. Have you lacked the energy to get things do in the way you used to?  never sometimes quite often very often always/all the time	one
13. Have you given up things you used to enjoy or were important because of cannabis (e.g. work, school, sports, hobbies, being with family and friends, etc.)?  none at all/nothing one or two things quite a few things lots of things everything	

# Readiness to Change Questionnaire (RTCQ) – information sheet

This questionnaire is used for assessing drinker's readiness to change drinking behaviours. It has been adapted to include cannabis behaviours.

#### Screens for

(12-item questionnaire) the patient's readiness to start to change, or for actual changes in current drinking habits (adapted to include cannabis), suggesting one of three stages:

- precontemplation not considering making any changes
- contemplation thinking about changes, may have started a few
- action already actively making changes

### Target population

Adults/adolescents

# Time to complete and score

12 items, three subscales
Pencil and paper, self-administered
Time required to adminiser: Two to three minutes
No training required for administration
Time required scoring: One minute
Scored by administrator
Norms available based on excessive drinkers
identified in general medical practice at general
hospital

# Research applicability

In research of brief, opportunistic intervention, especially in matching studies

# Source

Center for Alcohol and Drug Studies Plummer Court, Carliol Place, Newcastle upon Tyne NE1 6UR, UNITED KINGDOM Tel: 44(0)191219 5648 Fax: 44(0)191219 5649

### **Supporting references:**

Rollnick, S., Heather, N., Gold, R., & Hall, W. (1992). Development of a short "readiness to change" questionnaire for use in brief, opportunistic interventions among excessive drinkers. *British Journal of Addiction 87*, 743–754.

**Heather, N., Rollnick, S. & Bell, A.** (1993). Predictive validity of the Readiness to Change Questionnaire. *Addiction 88*, 1667–1677.

Heather, N., Gold, R. & Rollnick, S. (1991). Readiness to Change Questionnaire: User's manual. Technical Report no. 15. Kensington, Australia: National Drug and Alcohol Research Centre, University of New South Wales.

# **Readiness to Change Questionnaire - Cannabis revision**

Name:			
Date:			

The following questions are designed to identify how you personally feel about your cannabis right now. Please read each question below carefully, and then decide whether you agree or disagree with the statements. Please tick the answer of your choice to each question.

		Strongly disagree	Disagree	Unsure	Agree	Strongly agree	Office use
1	I don't think I use too much cannabis						Р
2	I am trying to use less cannabis than I used to						Α
3	I enjoy using cannabis, but sometimes I use too much						С
4	Sometimes I think I should cut down my cannabis						С
5	It's a waste of time thinking about my cannabis use						Р
6	I have just recently changed my pattern of cannabis use						А
7	Anyone can talk about wanting to do something about cannabis use, but I am actually doing something about it						А
8	I am at a stage where I should think about using less cannabis						С
9	My cannabis use is a problem sometimes						С
10	There is no need for me to think about changing my cannabis use						Р
11	I am actually changing my cannabis-using habits right now						Α
12	Using less cannabis would be pointless for me						Р

Revised by M. Hinton, from Rollnick, S., Heather, N., Gold, R., & Hall, W. (1992). Development of a short "readiness to change" questionnaire for use in brief, opportunistic interventions among excessive drinkers. *British Journal of Addiction 87*, 743–754.

# **Scoring the Readiness to Change Questionnaire**

### Quick method

The Precontemplation items are numbers 1, 5, 10, and 12; the Contemplation items are numbers 3, 4, 8, and 9; and the Action items are numbers 2, 6, 7, and 11. All items are to be scored on a 5-point rating scale ranging from:

- -2 Strongly disagree
- −1 Disagree
- o Unsure
- +1 Agree
- +2 Strongly agree

To calculate the score for each scale, simply add the item scores for the scale in question. The range of each scale is -8 through o to +8. A negative scale score reflects an overall disagreement with items measuring the stage of change, whereas a positive score represents overall agreement. The highest scale score represents the Stage of Change Designation.

Note: If two scale scores are equal, the scale farther along the continuum of change (Precontemplation—Contemplation—Action) represents the subject's Stage of Change Designation. For example, if a subject scores 6 on the Precontemplation scale, 6 on the Contemplation scale, and –2 on the Action scale, then the subject is assigned to the Contemplation stage. Note that positive scores on the Precontemplation scale signify a lack of readiness to change. To obtain a score for Precontemplation which represents the subject's degree of readiness to change, directly comparable to scores on the Contemplation and Action scales, simply reverse the sign of the Precontemplation score (see below).

If one of the four items on a scale is missing, the subject's score for that scale should be pro-rated (i.e. multiplied by 1.33). If two or more items are missing, the scale score cannot be calculated. In this case, the Stage of Change Designation will be invalid.

Scale scores, Read	liness to Change		
Precontemplation Contemplation Action		Precontemplation (reverse score)  Contemplation (same score)  Action (same score)	
Stage of Change D	esignation		
(P, C, OR A?)			

# **Modified Mini Screen (MMS)**

### - information sheet

### Screens for

The MMS is designed to identify people in need of an assessment respecting mood disorders, anxiety disorders, and psychotic disorders. It is not diagnostic per se, but is intended as an indicator of when more thorough mental health assessment is required.

# Time to complete and score

10 to 15 minutes

### Scoring

- score 10+: assessment needed
- score 6-9, assessment need should be determined by treatment team
- score < 6, no action necessary unless determined by treatment team
- if there is a Yes response to Q 4, 14, or 15, assessment is needed

### Public domain?

Yes

# Can client complete it?

Yes (not scoring)

# Where can I get it?

OASAS – MMS Tool: <a href="http://www.oasas.state.ny.us/hps/research/documents/MMSTool.pdf">http://www.oasas.state.ny.us/hps/research/documents/MMSTool.pdf</a>
OASAS – Screening for co-occurring disorders using the Modified Mini Screen (MMS) – User's Guide: <a href="http://www.oasas.state.ny.us/hps/research/documents/MINIScreenUsersGuide.pdf">http://www.oasas.state.ny.us/hps/research/documents/MINIScreenUsersGuide.pdf</a>
Connecticut Department of Mental Health and Addiction Services: <a href="http://www.dmhas.state.ct.us/cosig.htm#screening">http://www.dmhas.state.ct.us/cosig.htm#screening</a>

# Modified Mini Screen (MMS)

N	a	n	ıe	
---	---	---	----	--

Date:

# Section A

<ol> <li>Have you been consistently depressed or down, most of the day, nearly every day, for the past two weeks?</li> </ol>	YES	NO
2. In the past two weeks, have you been less interested in most things or less able to enjoy the things you used to enjoy most of the time?	YES	NO
3. Have you felt sad, low, or depressed most of the time for the last two years?	YES	NO
4. In the past month, did you think that you would be better off dead or wish you were dead?	YES	NO
5. Have you ever had a period of time when you were feeling up, hyper, or so full of energy or full of yourself that you got into trouble or that other people thought you were not your usual self? (Do not consider times when you were intoxicated on drugs or alcohol.)	YES	NO
6. Have you ever been so irritable, grouchy, or annoyed for several days, that you had arguments, verbal or physical fights, or shouted at people outside your family? Have you or others noticed that you have been more irritable or overreacted, compared with other people, even when you thought you were right to act this way?	YES	NO
Please Total the Number of "Yes" Responses to Questions 1–6.		

# Section B

<ol> <li>Note: this question is in two parts.</li> <li>a. Have you had one or more occasions when you felt intensely anxious, frightened, uncomfortable, or uneasy even when most people would not feel that way?</li> <li>YES NO</li> <li>b. If yes, did these intense feelings get to be their worst within 10 minutes?</li> <li>YES NO</li> </ol>	YES	NO
Interviewer: If the answer to BOTH a and b is YES, code the question YES.		
<ul> <li>8. Do you feel anxious or uneasy in places or situations where you might have the panic-like symptoms we just spoke about? Or do you feel anxious or uneasy in situations where help might not be available or escape might be difficult?</li> <li>Examples include: <ul> <li>being in a crowd</li> <li>standing in a line</li> <li>being alone away from home or alone at home</li> <li>crossing a bridge</li> <li>travelling in a bus, train, or car</li> </ul> </li> </ul>	YES	NO
9. Have you worried excessively or been anxious about several things over the past 6 months? Interviewer: If NO to question 9, answer NO to Q 10 and proceed to Q 11.	YES	NO
10. Are these worries present most days?	YES	NO
<ul> <li>11. In the past month, were you afraid or embarrassed when others were watching you, or when you were the focus of attention? Were you afraid of being humiliated?</li> <li>Examples include: <ul> <li>speaking in public</li> <li>eating in public or with others</li> <li>writing while someone watches</li> <li>being in social situations</li> </ul> </li> </ul>	YES	NO

<ul> <li>12. In the past month, have you been bothered by thoughts, impulses, or images that you couldn't get rid of that were unwanted, distasteful, inappropriate, intrusive, or distressing? Examples include: <ul> <li>were you afraid that you would act on some impulse that would be really shocking?</li> <li>did you worry a lot about being dirty or contaminated, or having germs?</li> <li>did you worry a lot about contaminating others, or that you would harm someone even though you didn't want to?</li> <li>did you have any fears or superstitions that you would be responsible for things going wrong?</li> <li>were you obsessed with sexual thoughts, images, or impulses?</li> <li>did you hoard or collect lots of things?</li> <li>did you have religious-practice obsessions?</li> </ul> </li> </ul>	YES	NO
<ul> <li>13. In the past month, did you do something repeatedly without being able to resist doing it?</li> <li>Examples include: <ul> <li>washing or cleaning excessively</li> <li>counting or checking things over and over</li> <li>repeating, collecting, or arranging things</li> <li>other superstitious rituals</li> </ul> </li> </ul>	YES	NO
<ul> <li>14. Have you ever experienced or witnessed or had to deal with an extremely traumatic event that included actual or threatened death or serious injury to you or someone else?  Examples Include: <ul> <li>serious accidents</li> <li>sexual or physical assault</li> <li>terrorist attack</li> <li>being held hostage</li> <li>kidnapping</li> <li>fire</li> <li>discovering a body</li> <li>sudden death of someone close to you</li> <li>war</li> <li>natural disaster</li> </ul> </li> </ul>	YES	NO
<ul> <li>15. Have you re-experienced the awful event in a distressing way in the past month?</li> <li>Examples include: <ul> <li>dreams</li> <li>intense recollections</li> <li>flashbacks</li> <li>physical reactions</li> </ul> </li> </ul>	YES	NO
Please Total the Number of "Yes" responses to Question 7-15.		

# Section C

16. Have you ever believed that people were spying on you, or that someone was plotting against you or trying to hurt you?	YES	NO
17. Have you ever believed that someone was reading your mind or could hear your thoughts, or that you could actually read someone's mind or hear what another person was thinking?	YES	NO
18. Have you ever believed that someone or some force outside of yourself put thoughts in your mind that were not your own, or made you act in a way that was not your usual self? Or have you ever felt that you were possessed?	YES	NO
19. Have you ever believed that you were being sent special messages through the TV, radio, or newspaper? Did you believe that someone you did not personally know was particularly interested in you?	YES	NO
20. Have your relatives or friends ever considered any of your beliefs strange or unusual?	YES	NO
21. Have you ever heard things other people couldn't hear, such as voices?	YES	NO
22. Have you ever had visions when you were awake, or have you ever seen things other people couldn't see?	YES	NO
Please Total the Number of "Yes" responses to Question 16-22.		

# chapter 12: worksheets

# **Seemingly Irrelevant Decisions**

from Steinberg et al. (2005)

When making any decision, large or small:

- · consider the options you have
- think about the possible outcomes of each option. What positive or negative consequences can you anticipate, and what are the risks of relapse?
- choose an option that will minimise your relapse risk. If you decide to choose a risky option, play how to protect yourself while in the high-risk situation
- watch for "red flag" thinking: thoughts like "I have to (do something, go somewhere, see someone)" or "I can handle (a certain high-risk situation)" or "it really doesn't matter whether (I just have a puff)"

### Practical exercise

Think about a decision you made recently or are about to make. The decision could involve any aspect of your life, such as your job, recreational activities, friends, or family. Identify choices that are safe and choices that may increase your risk of relapsing.

Decision to be made:
Safe alternatives:
Risky alternatives:

### **Cravings**

from Marlatt & Gordon (1985)

# What are cravings?

Cravings are a natural part of changing alcohol or other drug use and can cause some distress. Cravings are the result of long-term substance use and can continue long after use stops. People with a heavier history of use may experience stronger cravings.

A craving is like a wave at the beach. Every wave starts off small, builds up to its highest point, then breaks and flows away to shore. No individual wave lasts for more than a few minutes.

A craving is the same. It starts off small and builds up – and is made up of behaviours, thoughts, and physical symptoms. Once it reaches its peak, it eventually breaks and disappears. This whole process usually doesn't last more than about 10 minutes. How long do your cravings last? How severe are they on a scale of 1-10?

# What triggers cravings?

Cravings can be triggered by all sorts of things: people, places, things, feelings, situations, or anything else that has been associated with past alcohol or other drug use.

Be aware: sometimes, especially if you're stressed or experience a trigger, the craving can return really strongly! What are your triggers? What do you notice when cravings start (thoughts, feeling & behaviours).

# What if I only use once in a while?

Cravings are like stray cats: if you keep feeding them, they will keep coming back. Even if you use just once in a while, you will still keep those cravings alive. Cravings are strongest in the early parts of cutting down or quitting, but people may continue to experience cravings for the first few months and sometimes even years after stopping their drug use.



# How do I get rid of cravings?

Cravings only lose their power if you don't add force to them by drinking or using. Each time a person does something other than drink or take drugs, the craving loses its power. In time, the peak of the craving wave becomes smaller and the waves further apart. Quitting totally is the best and quickest way to get rid of the cravings.

# **Coping with cravings**

adapted from Hinton et al. 2002

How do you experience cravings? Describe the physical symptoms (e.g. heart racing; feeling sick), behaviours (e.g. fidgeting), and thoughts (e.g. "I must have a smoke") that you experience when craving:

Physical symptoms:	
Behaviours:	
Thoughts:	
My main craving triggers are:	How can I deal with this trigger?:
1.	AVOID or
2.	AVOID or
3.	AVOID or
4.	AVOID or
5.	AVOID or
	d, you need to find ways to cope with them. Below are some options for symptoms, the behaviours, and the thoughts that add up to a craving. s you think you could do.
Behavioural coping skills:	
• Eat regularly, even when you don't feel	like it.
• Drink plenty of water – especially when	1 you get the craving.

Use the "3Ds" when your craving is set off.

**Delay:** When you experience a craving, put off the decision to use for one hour.

• Chew gum or suck on a lolly instead of drinking alcohol or using.

**Distract:** Once the decision to use is delayed, do something else for that hour, like going for a walk, calling a friend or listening to music. This breaks the habit of immediately reaching for alcohol or other drugs when you get a craving. You will find that once you are interested in something else, the craving will go away.

**Decide:** After the craving has passed, reflect on your past successes with reducing substance use and reasons for stopping or reducing use, and congratulate yourself for not giving into the craving. Many people try to cope with their urges by gritting their teeth and toughing it out.

# **Urge surfing**

from Steinberg et al. (2005)

Some urges, especially when you first return to your old using environment, are too strong to ignore. When this happens, it can be useful to stay with your urge to use until it passes. This technique is called *urge surfing*.

Urges are like ocean waves. They are small when they start, grow in size, and then break up and dissipate. You can imagine yourself as a surfer who will ride the wave, staying on top of it until it crests, breaks, and turns into less powerful, foamy surf. The basis of urge surfing is similar to that of many martial arts. In judo, one overpowers an opponent by first *going with* the force of the attack. By joining with the opponent's force, one can



take control of it and redirect it to one's advantage. This type of technique of gaining control by first going with the opponent allows one to take control while expending a minimum of energy. Urge surfing is similar. You can join with an urge (rather than meet it with a strong opposing force) as a way of taking control of your urge to use. After you have read and become familiar with the instructions for urge surfing, you may find this a useful technique when you have a strong urge to use.

# Urge surfing has three basic steps:

1. Take an inventory of how you experience the craving. Do this by sitting in a comfortable chair with your feet flat on the floor and your hands in a comfortable position. Take a few deep breaths and focus inward. Allow your attention to wander through your body. Notice where in your body you experience the craving and what the sensations are like. Notice each area where you experience the urge, and tell yourself what you are experiencing. For example, "Let me see – my craving is in my mouth and nose and in my stomach".



- 2. Focus on one area where you are experiencing the urge. Notice the exact sensations in that area. For example, do you feel hot, cold, tingly, or numb? Are your muscles tense or relaxed? How large an area is involved? Notice the sensations, and describe them to yourself. Notice the changes that occur in the sensation. "Well, my mouth feels dry and parched. There is tension in my lips and tongue. I keep swallowing. As I exhale, I can imagine the smell and taste of cannabis."
- 3. Refocus on each part of your body that experiences the craving. Pay attention to and describe to yourself the changes that occur in the sensations. Notice how the urge comes and goes.

Many people notice that after a few minutes of urge surfing the craving vanishes. The purpose of this exercise, however, is not to make the craving go away but to experience the craving in a new way. If you practise urge surfing, you will become familiar with your cravings and learn how to ride them out until they go away easily.



### **Decisional balance sheet**

adapted from Hinton et al. (2002)

# This worksheet will help you:

- to think about the costs and benefits of your current cannabis use
- to understand factors that affect your smoking decisions
- · to decide what you want to do about it

# Thinking about your smoking

Thinking about your cannabis use, ask yourself:
"What do I stand to lose and what do I stand to gain by
continuing my current cannabis patterns?"
"What role does cannabis play in my life?"
You might be getting some benefits from your smoking
such as relaxation or social opportunities; but you may
be experiencing some difficulties as well.

# Making Up Your Mind exercise

One of the things that can help clarify your thoughts about your smoking is to list all the benefits and the costs of changing and of continuing your current cannabis use.

Look at the sample below and add your own comments.

	Continuing cannabis use at same level	Cutting down my cannabis use	Quitting cannabis
Good things	I don't have to change anything	I wouldn't spend as much	My mood would improve
Not so good things	My partner would still be on my back	Once I start I find it hard to stop	I wouldn't see my friends as much

Mark the positives and negatives that are most important to you, or another way is to rate each point on a scale of least important (1) to most important (10) and see which column has the biggest number.

# **Cannabis Ladder**

adapted from Slavet et al. (2006)

10	I have changed my cannabis use and will never go back to the way I used cannabis before.
9	I have changed my cannabis use, but I still worry about slipping back, so I need to keep working on the changes I've made.
8	I plan on using cannabis, but I'll make some changes, like cutting back on the amount of cannabis that I use.
7	I definitely plan to change my cannabis use, and I'm almost ready to make some plans about how to change.
6	I definitely plan to change my cannabis use, but I'm not ready to make any plans about how to change.
5	I often think about the way that I use cannabis, but I have no plans to change.
4	I sometimes think about the way that I use cannabis, but I have no plans to change it.
3	I rarely think about changing my cannabis use, and I have no plans to change it.
2	I never think about changing the way that I use cannabis, and I have no plans to change.
1	I enjoy using cannabis and have decided never to change it. I have no interest in changing the way that I use cannabis.

# **Cannabis-use diary**

Day, date	Where and with whom did you use?	How were you feeling?	How much did you use (approx.)?	Cost (\$)

<b>Personalised</b>	feedback	summary	/
---------------------	----------	---------	---

adapted from Hinton et al. (2002)

P	r۵	рa	r۵	Ч	fο	r.
г	ıe	υa	ıe	u	ıu	

This personalised feedback summary will give you a picture of your current cannabis use.

# How much is a problem?

- You reported using cannabis on \_\_\_\_\_\_% of days last month.
- You reported that you had \_\_\_\_\_\_ bongs/joints last year.
- You also consumed \_\_\_\_\_ cigarettes, if you used a 50% mix (most cannabis-smokers use more than this in a mix).
- This means that you spent \$\_\_\_\_\_ to \$\_\_\_\_\_, depending on costs.
- You spent\_\_\_\_\_ hours in activities related to smoking cannabis.

# Where does your cannabis smoking fit?

High
Very high
High
Medium
Low
No problem

# **Relaxation training – for clinicians**

#### Overview

Relaxation training involves a range of procedures to voluntarily release tension.

These techniques can be used in everyday situations when stress arises.

#### Goals

- recognise physical and psychological tension
- learn to relax in a total sense
- use mental imagery to reduce psychological tension
- use specific muscle groups to release tension

### Method

- explain that in response to stress we have a flightor-flight response wherein the muscles become more tense, breathing becomes more rapid and shallow, and we become alert
- these reactions are normal, but when someone experiences stress for a long time, muscle tension can remain high and it can be difficult to recognise it as it can feel "normal"
- constant tension can cause anxious feelings and contribute to relapse
- effective relaxation starts with unchallenging situations and needs to be built upon to be able to be used in the face of stressful situations
- basic procedures can be taught in one to three sessions but needs to be practised regularly for up to eight weeks
- more practice brings more benefits
- relaxation techniques are implemented best with (a) a quiet environment, (b) a comfortable position (not in bed), (c) a passive attitude, and (d) techniques that promote tension reduction

### Types of relaxation

Progressive muscle relaxation	Involves the active tensing and relaxing of muscle groups in the body in an ordered and progressive sequence
Meditative relaxation procedures	Mental relaxation that includes silently repeating a work like "relax" or pleasant imagery
Isometric procedures	Involve one muscle working against another  Most of the exercises do not involve any apparent movement so can be done without embarrassment

Corresponding worksheets:

- 1. Tips for better sleep
- 2. Relaxing your muscles

### Worksheet - Tips for better sleep

Go to bed only when sleepy.

Do not use your bed for anything except sleep and sexual activity. Do not read, watch television, eat, or worry in hed

If you find yourself unable to sleep, get up and go into another room. Stay up as long as you wish, preferably engaging in a boring activity. Go back to bed only when you feel sleepy. If you are in bed for more than 20 minutes without falling asleep, get out of bed. Repeat this as often as is necessary.



Set your alarm and get up at the same time each day, regardless of how much sleep you had during the night. A constant wake-up time helps your body to acquire a consistent sleep rhythm. If you have trouble falling asleep, try to miss any naps you are having during the day, and see whether this improves your sleep.

Avoid physical activity in the late evening.

Avoid stimulants like tea, coffee, cocoa, or cigarettes before bedtime.



Avoid alcohol, especially in the evening. Although alcohol may help you fall asleep more easily, it is likely to lead to disrupted sleep. Sleeping pills may help initially but can be unhelpful longer term.

If you feel angry and frustrated because you cannot sleep, do not try harder and harder to sleep. This can make sleeping more difficult. Get out of bed, go to a different room, and do something different.



### **Relaxing your muscles**

When you practise at home, make sure that:

- you are wearing comfortable clothes
- you minimise distractions (turn your phone off, shut the blinds)
- you sit in a comfortable chair (your goal is to be relaxed while awake)
- you never strain your muscles; just tighten enough to notice the differences between when your muscles are tense and when they are relaxed

### Steps:

- 1. Sit in a comfortable chair and close your eyes.
- 2. Clench the muscles in your face and jaw. Don't strain the muscles; just tighten them. Now, let go slowly. Concentrate on the release of tension.
- 3. Lift up your shoulders and put your head back. Don't strain your muscles; just tighten them. Now, let go slowly, releasing the tension. Let your shoulders drop, and straighten your head.
- 4. Hold your arms out straight out in front of you, and make a fist with your hands. Don't strain your muscles; just tighten them. Now, let go slowly, releasing the tension. Let your arms fall down gently.
- 5. Tighten your stomach muscles. Don't strain your muscles; just tighten them. Now, let go slowly. Concentrate on the release of tension.
- 6. Stretch your legs, and tighten your leg muscles. Don't strain your muscles; just tighten them. Now, let go slowly. Release all the tension. Let your feet gently fall back to the floor.
- 7. Sit for a while and enjoy the warm and heavy feeling in your muscles. When you get up, try to keep this calm feeling.
- 8. Try to practise relaxation every day, for best results.



# Cannabis withdrawal syndrome – client information

Many regular cannabis users are likely to experience some withdrawal symptoms; others may have little or no discomfort upon stopping use. For many users, the psychological symptoms are most difficult. There are also a number of physical symptoms, which can be uncomfortable but are not dangerous.

Common symptoms	Less common symptoms
Anger Aggression Irritability Nervousness/anxiety	Chills Stomach pains Shakiness Sweating
Appetite changes Restlessness Sleep difficulties Strange dreams	Depressed mood

Withdrawal symptoms are actually signs that the body is recovering and re-adapting to being cannabis free, so they are positive signs of recovery. Generally speaking, withdrawal symptoms resolve within five to ten days. Some symptoms, such as developing good sleeping patterns, generally take longer.

# Quitting tobacco at the same time

Many people who smoke cannabis either smoke tobacco or mix tobacco in with their cannabis. If you mix tobacco in with cannabis, it is likely that some of your withdrawal symptoms are caused by tobacco withdrawal.

Being in withdrawal from both doesn't mean that it will be twice as hard or bad, and research tells us that it is better to quit both tobacco and cannabis simultaneously. If you are worried about your ability to quit both tobacco and cannabis at the same time, discuss possible nicotine replacement treatments with your doctor.

### **Treatment options**

There are a number of drug-treatment options available in Australia. Some treatment options include counselling, support groups, and education groups. You can also call the Cannabis Information and Helpline on 1800 30 40 50 or contact your local Alcohol Drug Information Service. At this stage, there are no medications available to help specifically with cannabis withdrawal, although your GP may recommend medication for other issues, such as low mood or sleeping difficulties. This will depend on your individual situation.

### Monitoring withdrawal symptoms

You may like to copy and use this table to monitor your withdrawal symptoms over the course of one week by placing a tick in the space next to each symptom. You will see the number and severity of symptoms reduce quite quickly.

### Managing withdrawal symptoms

Symptoms	Mild	Moderate	Severe
Depressed mood			
Changes in appetite			
Sleep difficulty			
Sweating/night sweats			
Cravings for cannabis			
Restlessness/irritability			
Aggression/anger			
Headaches			

### Cannabis-withdrawal syndrome - Client information continued

Develop a withdrawal management plan with a friend, family member, or clinician. This may include:

- removing all smoking implements, to remove temptation
- making an extra effort to eat well and do some gentle exercise
- writing down the pros and cons of quitting, and displaying this somewhere where you will look at it often
- not planning too many stressful things like deadlines in the first few weeks after quitting, but planning enjoyable activities to distract you from use
- · finding a friend or someone else who will support you and help distract you from the urges
- trying not to beat yourself up if you have a lapse
- planning a reward for yourself once you have achieved your goal

Pros of quitting/cutting down	Cons of quitting/cutting down
1	1
2	2
3	3
4	4
5	5
6	6

Make an appointment to see your doctor/clinician to monitor your progress and to develop strategies to consolidate and build on your success.

# Problem-solving skills - for clinicians

adapted from Steinberg et al. (2005)

### Overview

- problem solving is appropriate for all drug issues and can be applied regardless of whether clients are looking to reduce or abstain
- these skills can be applied in group or individual settings
- the basics of these skills can be taught in session but need to be practised, refined, and reinforced to be effective

### Goals

- recognise a problem's existence
- generate a variety of potential solutions
- select the more appropriate options, and generate an action plan
- evaluate the effectiveness of the approach

Process	Details	
Defining exactly what the problem is	<ul><li>Define the problem in terms of concrete behaviours</li><li>If multiple behaviours exist, ask the client to prioritise</li></ul>	
Brainstorming options to deal with the problem	<ul> <li>No criticism is allowed</li> <li>Be as creative as possible</li> <li>Number of ideas is important</li> <li>What has worked before?</li> </ul>	
Choosing the best option(s)	<ul> <li>Delete impractical strategies</li> <li>Consider pros and cons of each viable option</li> <li>Discuss any issues that may hinder action of option</li> </ul>	
Generating a detailed action plan	<ul><li>Break up actions into concrete steps</li><li>Decide when, where, how, and with whom</li></ul>	
Putting the plan into action	Practise actions in session through role plays and home practice exercises	
Evaluating the results	<ul><li>Does the option resolve the problem in total or only in part?</li><li>Does the strategy need improving, or is a new strategy needed?</li></ul>	

 $Corresponding\ worksheet:\ Problem-solving\ worksheet-client\ worksheet$ 

Problem-solving worksheet —client worksheet adapted from Steinberg et al. (2005)				
. A problem I would like to solve:				
2. What can I do? (Brainstorm	all creative ideas):			
3. Pros and cons of each solu	tion			
Possible solution	Benefits		Costs	
Which one will I choose?				
4. Action plan				
How?				
When?				
Where?				
With whom?				
5. How did it go?				
Good things		Not so good thing	S	
Try this process again?				

Yes

No

# **Relapse prevention – for clinicians**

### Overview

- relapse prevention (RP) should be included in all treatment programs
- relapse is so common that it should be viewed as a normal part of the change process
- RP helps to prevent relapses and also to learn from experiences
- RP may draw on other skills such as problem solving, challenging negative thoughts, etc

# **Key concepts**

- identifying high-risk situations and developing skills to deal with triggers
- distinguishing between some use (slip or lapse) and return to regular use (relapse)

Process	Details
Enhancing the commitment to change	A high-quality resolution to change is an importance aspect of moderating use or maintaining abstinence  Discuss the reasons for change, and write them down so that they can be used as reminders and motivators
Identifying high-risk	Details: when, where, with whom, doing what, and feeling what
Situations	A diary can capture this, or questionnaires such as the Cannabis Situational Confidence Scale
Teaching coping and other useful skills	Clients are to implement coping skills when clients have the confidence to handle a high-risk situation (see problem-solving worksheet)
	Other skills may include coping with social pressure, coping with mood disturbances, craving management (see urge-surfing worksheet)
Other helpful hints to avoid temptation	One of the most useful strategies for dealing with high-risk situations is planning ahead. Another is recognising "seemingly irrelevant decisions" (see worksheet)
Preparing for lapse	Saunders and Allsop (1991) suggest you do a "relapse drill" similar to a fire drill, in which you create a plan for preventing a slip from becoming a full-scale relapse. This involves identifying emotional and situational factors
Other lifestyle issues important to maintaining change	Factors such as social networks, support networks (including self-help groups), communication skills, and engagement in hobbies are important aspects of treatment success

# Cannabis-use risk hierarchy

adapted from Hinton et al. (2002)

Degree of risk (0–10)	Situation			Management strategies
Degree of ris	sk 10: Severe	7: Moderate	4: Mild	o: Nil

### Principles of cannabis refusal skills

adapted from Hinton et al. (2002)

### Refusal skills consist of six easy-to-use strategies:

### 1. BE ASSERTIVE in body language and tone of voice.

Make direct eye contact. Stand or sit at the same level as or above the person offering you cannabis. Use a strong, firm, confident voice. Those offering cannabis are more likely to persist when an individual doesn't look or sound convincing.

### 2. Without hesitation, SAY NO. Remember, he (or she) who hesitates is lost!

Be firm but polite. "No" can then be expanded with a message about your intentions in the future to prevent further offers. For example:

- No. Sorry, hadn't you heard? I've quit.
- No, thanks, doctor's orders.
- Sorry, but I've been coughing up my lungs, and I'm sick of it. Not tonight, thanks.
- No, thanks, I'm not feeling too good.
- Not for me, I don't enjoy it any more.
- No, thanks. Not today. I'm taking a break from it.
- Thanks, but no, thanks. I'm on the straight and narrow these days.
- No, thanks. I'm driving.

### 3. SUGGEST AN ALTERNATIVE ACTIVITY rather than using cannabis.

- It might be useful to suggest activities in non-drug-using environments: No, thanks...
- What about getting a video?
- Who's up for a game of basketball?
- Feel like phoning... to see what he's doing?
- What about a movie?

### 4. When challenged, REPEAT YOURSELF, then CHANGE THE SUBJECT.

- a) People get the message that you won't change your mind when it is repeated, without variation, over and over.
  - I'd rather not go into the details, but I really can't because of my health.
  - Not for me tonight, but you go right ahead.
  - This is hard enough please help me stick to my guns.
  - I'd really prefer a coffee can I make one for anyone else?
- b) Change the topic to non-cannabis related topics. This gives the message that discussion is over. For example:
  - No, thanks. What do you want to do tonight?
  - No, thanks. How much should you pay for a reasonable car?
  - No, thanks. Do you think vampires would be scared of Buffy the vampire slayer?
  - No, thanks. Did you know there's a sale on at the surf shop?

## 5. AVOID EXCUSES AND VAGUE ANSWERS

Remember the KIS principle: Keep It Simple! Stick to the point – NO. Getting involved in long, drawn-out excuses can backfire, resulting in equally long discussions about the positive things about using cannabis. These discussions only make it harder to refuse.

### 6. If all else fails, LEAVE.

If people will not take "No" for an answer, and if you feel your commitment to saying NO is wavering, avoidance is the best policy. Leave!

- If you guys aren't doing anything, I might catch up with you tomorrow.
- If it's a hassle, I can leave and catch up with you later.

# The "psychological squirm" worksheet - clinician

adapted from Hinton et al. (2002)

To proceed, first the client is asked:
Describe your good qualities. Describe the good things about yourself.
The client and clinician explore the more positive aspects of the client by constructing a list of qualities.
The clinician then asks the client:
Now how would you describe a cannabis user?
This is explored thoroughly before the clinician asks the client to compare these two lists. For example:
What do you think of these two lists: how well do they fit together?
What do you think of these the lists. Now well do they fit together.

#### **Pleasant activities**

from Macphillamy & Lewinsohn (1982)

In stopping your cannabis use, you are giving up an activity that has taken up a great deal of your time. It is important that you identify other activities that bring you pleasure, and integrate them into your everyday life.

Your assignment is to do something nice for yourself every day, something you wouldn't necessarily spend the time, effort, or money to do for yourself otherwise. You may need to get your partner's, supporter's, or someone else's cooperation to do this, but don't hesitate to ask.

It doesn't matter whether it's having dinner out, shopping for something you've been wanting, taking a hot bath, jogging — it should be something that makes you feel as if you're treating yourself. You deserve it! If it involves spending a little more money than usual, remember that you'll be saving money by not smoking cannabis. You'll gradually find ways to treat yourself that are less expensive. Keep a record of these over the next week, and we'll discuss them next time.

### Some examples:

Movies; watching TV; listening to music; playing computer games; playing cards; solving a puzzle; reading; playing a musical instrument; yoga; exercise; drawing; painting; cooking; photography; gardening; eating; e-mailing a friend; massage; drinking tea or coffee; having a bath; taking a nap; visiting a beautician; meditation; swimming; booking a holiday; going to a market, park, or museum; shopping; watching sport; internet chat; writing in a diary; wearing clothes you like; hanging out with friends; dancing; riding a bike; telling a joke; surfing the internet; going to a garage sale; going for a drive.

Day	Plan for increasing pleasant activities (List at least one target for each day)	Follow-up (What did you end up doing, each day?)
1		
2		
3		
4		
5		
6		

# Managing negative moods and depression

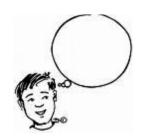
adapted from Kadden et al. (2004)

Use the Three As to overcome your depression.

- 1. Be aware of the symptoms of depression:
  - be aware of your moods and the situations that influence them
  - be aware of your automatic negative thoughts
- 2. **Answer** or respond to these thoughts:
  - ask questions, and challenge the assumptions behind these thoughts
  - replace the negative thoughts with positive ones

### 3. Act differently:

- increase your positive activities
- decrease your involvement in unpleasant activities
- reward yourself for the positive steps you're taking



### **Practice exercise**

Use this worksheet to become aware of the issues involved in your depression and the steps you can take to change your moods.

1.	What are the ways in which I show my depression in my moods, attitudes, and actions? What are my symptoms?
2.	What are the automatic negative thoughts that go along with my depression? What do I think about myself, my current situation, and my world in general?
_	
3.	What questions can I ask myself to challenge these automatic negative thoughts?
_	
4.	What steps am I going to take to act differently? What problem-solving strategies have I come up with to cope with my problems? What pleasant activities might I increase? What unpleasant activities might I avoid or minimise?

### Assess importance of making a change in cannabis use - clinicians

To assess the importance of making a change in current cannabis use, ask clients:

"On a scale of one to ten, how important is it for you to make a change in your substance use?"

If the importance of making a change is

#### Low:

"OK, so it is not that important to you at this time. I wonder whether I can provide you with a little information about [substance]? Even if you don't want to make a change in your substance use, there is some information I can give you on how to reduce the harms associated with use."

If it is not important to change substance use, explore the Stages of Change diagram and discuss what stage of change the person is at. Advise the person that it is common to move back and forth between stages.

### Medium:

"So, about the middle. But I'm wondering, why did you say a '4' and not a '1'? So, one reason it's important is... What else?"

### High:

"So, it's very important for you to do something about your cannabis use. Why is that? So, one reason it's important is... What else?"

Follow up those clients who see change as important by asking about their plans to make this important change, with a goal of eliciting change talk.

For clients with mental health problems

Assess separately the importance of making a change in substance use and in depressive/anxiety symptoms. The above questions should be asked first about depressive/anxiety symptoms, and then about substance use, as this is more likely to decrease the young person's resistance toward substance use changes

### Assess confidence of making a change in cannabis use - clinicians

Assess individual's confidence to change their cannabis use:

"On a scale of one to ten, how confident are you that you could make a change if you wanted to?"

Explore the person's confidence in making a change by asking:

If the importance of making a change is:

#### Low:

"Pretty low. What would it take to raise that '1' up to, say a '5'? Tell me about a change you made in the past. How did you go about it?"

### Medium:

"So, about in the middle. But why a '4' and not a '1'? What else? What would it take to raise your confidence to say, an '8'? How would you go about it? How can I be of help?"

#### High:

"So, you're quite confident. How would you go about it? What would it look like? What else? How can I be of help?"

Note: A lack of confidence on the scale (less than 7) indicates it may be necessary to return to Phase I motivational interviewing strategies or review strategies included in the change plan.

For clients with mental health problems

Assess confidence in making a change for both anxiety/depression and substance use separately. If the person is low in confidence about addressing anxiety/depression but not substance use (or vice versa), address accordingly by returning to MI strategies or reviewing change strategies

### **References:**

**Hinton, M., Elkins, K., Edward, J., & Donovan, K.** (2002). Cannabis and psychosis: An early psychosis treatment manual. Government of Victoria, Department of Human Services. Published by Orygen Research Centre, Victoria.

Kadden, R., Carroll, K., Donovan, D., Cooney, N., Monti, P., Abrams, D., Litt, M., & Hester, R. (1992). *Cognitive—behavioral coping skills therapy manual: A clinical research guide for therapists treating individuals with alcohol abuse and dependence*. NIAAA Project MATCH Monograph Series, DHHS Publication no. (ADM) 92-1895, vol. 3. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.

**Marlatt, G. & Gordon, J.** (1985). *Relapse prevention: Maintenance strategies in the treatment of addictive behaviors.*New York: Guilford Press.

MacPhillamy, D.J. & Lewinsohn, P.M. (1982). The Pleasant Events Schedule: Studies on reliability, validity, and scale intercorrelations. *Journal of Consulting and Clinical Psychology* 50, 363–380.

Slavet, J.D., Stein, L.A.R., Colby, S.M., Barnett, N.P., Monti, P.M., Golembeske, C.Jr. & Lebeau-Craven, R. (2006). The Marijuana Ladder: Measuring motivation to change marijuana use in incarcerated adolescents. *Drug and Alcohol Dependence* 83, 42-48

**Saunders, B., & Allsop, S.** (1991). Alcohol problems and relapse: Can the clinic combat the community? *Journal of Community and Applied Social Psychology* 1, 213-221

Steinberg, K.L., Roffman, R.A., Carroll, K.M., Mcree, B., Babor, T.F., Miller, M., Kadden, R., Duresky, D., & Stephens, R. (2005). *Brief counselling for marijuana dependence: A manual for treating adults*. SAMHSA, Center for Substance Abuse Treatment. Rockville MD.

# appendices

# Appendix 1: Levels of evidence

### The following five steps were implemented

- Grade each of the five components and note any important issues arising in the discussion and grading on the form.
- 2. Write an evidence statement summarising briefly the assessment of the five separate components.
- 3. The grades for each of the components and the accompanying descriptor (excellent, good, satisfactory, poor) should be written in the relevant boxes.
- 4. Determine the overall grade for the body of evidence by summing the individual component grades.
- 5. Formulate a recommendation based on this body of evidence. The recommendation should address the original clinical question and ideally be written as an action statement.

# **Grading matrix**

Component	A Excellent	B Good	C Satisfactory	D Poor
Volume of evidence	Several level I or II studies with low risk of bias	One or two level II studies with low risk of bias or a SR/ multiple level III studies with low risk of bias	Level III studies with low risk of bias, or level I or II studies with moderate risk of bias	Level IV studies, or level I to III studies with high risk of bias
Consistency	All studies consistent	Most studies consistent and inconsistency may be explained	Some inconsistency reflecting genuine uncertainty around clinical question	Evidence is inconsistent
Clinical impact	Very large	Substantial	Moderate	Slight or restricted
Generalisability	Population/s studied in body of evidence are the same as the target population for the guideline	Population/s studied in the body of evidence are similar to the target population for the guideline	Population/s studied in body of evidence different to target population for guideline but it is clinically sensible to apply this evidence to target population	Population/s studied in body of evidence different to target population and hard to judge whether it is sensible to generalise to target population
Applicability	Directly applicable to Australian healthcare context	Applicable to Australian healthcare context with few caveats	Probably applicable to Australian healthcare context with some caveats	Not applicable to Australian healthcare context

# Appendix 2: Authors of background papers

Author	Position	Affiliation	
Dr Adam Winstock	Senior Staff Specialist/Conjoint Senior Lecturer	Drug Health Services Sydney South West Area Health Service/National Drug and Alcohol Research Centre	
Prof Alan Budney	Professor and Senior Research Scientist	Center for Addiction Research (CAR) University of Arkansas for Medical Sciences	
Prof Amanda Baker	Deputy Director/Clinical Psychologist	Centre for Brain and Mental Health Research University of Newcastle	
Dr Amie Frewen	Senior Research Officer	National Cannabis Prevention and Information Centre	
Dr Dan Lubman	Associate Professor/Consultant Psychiatrist	ORYGEN Research Centre University of Melbourne	
Dr Greg Martin	Manager of Interventions Development	National Cannabis Prevention and Information Centre	
Dr Jan Bashford	Clinical Researcher	Massey University	
Prof Jan Copeland	Director	National Cannabis Prevention and Information Centre	
A/Prof Jason Connor	Director, Centre for Youth Substance Abuse Research	University of Queensland	
Dr John Howard	Senior Lecturer	National Cannabis Prevention and Information Centre	
Dr Julia Tresidder	Research Analyst	Australian Institute of Criminology	
Dr Leanne Hides	Senior Research Fellow Coordinator/ Research Fellow	ORYGEN Research Centre University of Melbourne	
Dr Mark Montebello	Senior Staff Specialist/Medical Team Coordinator/Conjoint Senior Lecturer	The Langton Centre, Sydney/School of Psychiatry University of New South Wales	
Dr Peter Homel	Manager of the Crime Reduction and Review Program/Adjunct Professor	Australian Institute of Criminology/Griffith University	
Prof Roger Roffman	Professor of Social Work	University of Washington	
Prof Robert Stephens	Professor and Chair	Psychology Department, Virginia Tech	
Dr Sally Wooding	Clinical Psychologist/Senior Research Officer	Office of Mental Health and Drug and Alcohol Policy	
Prof Simon Lenton	Deputy Director/Clinical Psychologist	National Drug Research Institute	
Dr Stephanie Taplin	Research Fellow	National Drug and Alcohol Research Centre	
Mr Toby Lea	Researcher	Drug Health Services Sydney South West Area Health Service	

This page has been left blank intentionally.

This page has been left blank intentionally.

This page has been left blank intentionally.



UNSW Randwick Campus NDARC UNSW R1 Level 1 22-32 King Street Randwick NSW 2031

T 61 2 9385 0208 E info@ncpic.org.au