

Guidelines for Recognising, Assessing and Treating Alcohol and Cannabis Abuse in Primary Care

National Health Committee

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From the National Health Committee

This guideline for recognising, assessing and treating substance abuse in primary care is the third in the series released by the National Health Committee. It forms the final part of a trilogy of guidelines addressing common mental disorders, the other two focusing on depression and anxiety. This document concentrates on problem consumption of alcohol and includes reference to cannabis as a drug of common use in New Zealand.

Non-dependent but nonetheless harmful or hazardous levels of alcohol consumption comprise by far the greater proportion of problem drinking in this country. It has been estimated that 20 percent of New Zealanders consume alcohol at a harmful or hazardous level. This causes medical, relationship, work-related and legal problems for those involved. The National Health Committee encourages widespread screening and brief interventions for those at risk as a way acting early to prevent later problems.

Although treating common mental disorders costs money, it is an investment likely to lessen the considerable burden of illness on the community. Many of those believing they need professional help for psychological problems do not seek it because of their attitudes and beliefs about mental health - needing to be strong enough to cope alone, for instance. Because

most people have regular contact with primary care health services, the anxious, depressed or substance misusing patient is likely to see their GP even though psychological problems may not be the main reason for the consultation.

Primary health care is the most appropriate locus for early intervention in these problems. Alcohol abuse, as with depression and anxiety, often goes undetected at the primary care level. When it is recognised, the means exist to encourage patients to reflect on their behaviour and reduce their consumption.

The National Health Committee is keen to see these guidelines taken up, modified if necessary, and owned by the practitioners who will implement them. We recommend phasing in the guidelines and establishing a framework for making primary mental health care widely available. Such a framework should be tested as an evaluated pilot in an integrated care setting.

The Committee wishes to thank the working party and all those who contributed to this project. We believe these guidelines are a sound framework for recognising, assessing and treating those engaged in harmful and hazardous drinking. The better management of all three primary mental disorders will lead to a significant improvement in the health of the community.

Introduction

The guideline deals primarily with alcohol and to a lesser extent with cannabis, two of the three most commonly used drugs in New Zealand. Implementing improved detection and early intervention strategies for alcohol and cannabis abuse may have a significant positive impact on public health, and the individual's quality of life. Nicotine is another widely used drug of dependence but it is not dealt with by these guidelines. Guidelines for smoking cessation in primary care are already available. Reference is made throughout the document to substance abuse because much of the advice given to primary care practitioners is applicable to a wider range of drugs than just alcohol and cannabis.

Why is substance abuse a problem?

Substance abuse is a major cause of premature death, preventable ill health and social harm throughout the population (Dunbar, 1994). It causes tremendous psychological harm in the community. Further costs of substance abuse to the individual include 'the 4 Ls':

Liver: physical harm from alcohol related disease or trauma.

Lover: relationship, marital, and family problems; domestic violence.

Livelihood: employment problems, absenteeism, poor work performance.

Law: any legal difficulties; drink driving, possession of illicit substances.

The abuse of alcohol and cannabis now pervades New Zealand society and dominates youth culture.

For use in primary care

These guidelines aim to support primary care practitioners (including, but not limited to GPs and practice nurses) in recognising, assessing and treating clients with problem use of alcohol and cannabis. The guidelines provide detailed information on brief interventions that are effective in reducing consumption and drug-related harm. They indicate where referral to specialist services is appropriate.

Alcohol abuse frequently goes undetected

Approximately 80 percent of the New Zealand population visits their general practitioner every twelve months (Statistics, 1993). However,

between 65 and 82 percent of patients presenting to general practice with alcohol related problems (as identified by consumption levels or screening tests) are not detected by their general practitioner (Rydon et al, 1992). A study of the epidemiology of psychiatric disorders in Christchurch found that 49 percent of people with alcohol abuse and/or dependence had visited their doctor, but less than ten per cent of them said they had talked to their doctor about their drinking. Only 13 percent had ever received any form of treatment for their drinking (Wells et al, 1991).

Recommendations based on evidence

The recommendation for brief intervention in problem drinking behaviour is supported by evidence from randomised controlled trials (see Appendix Four). The AUDIT screening tool is recommended for its cross national validation and high levels of sensitivity and specificity. Other recommendations to primary care practitioners are based on expert opinion.

The guidelines rely heavily on international research. Many issues concerning substance use in New Zealand require further research, (for example the lack of data regarding the impact of substance use among Maori and the efficacy of generic treatments in addressing these issues). The guidelines are intended to enhance existing culturally specific treatment approaches, not to replace them.

Internationally, there is very little research on treatment of cannabis-related problems, and there is none at all in the New Zealand primary care context. The general approach taken by most service planners and researchers has been to apply lessons from the understanding of alcohol use, abuse and dependence to other substances in a common-sense way.

The guidelines seek to increase access to early intervention in primary care, by:

- reducing the harm to, and promoting the health of those with substance problems,
- encouraging primary health care professionals to screen at-risk population groups,
- identifying treatment options for the individual with substance use problems, and
- promoting cost-effective brief intervention in primary care.

Alcohol

There is no doubt that responsible, controlled use of alcohol is possible for the majority of people who gain pleasure from its relaxant properties and mood altering effects. As well as its positive subjective aspects, moderate alcohol use may have health benefits for some people.

The cost of alcohol abuse

The estimated cost of alcohol abuse to New Zealand society is between \$1-\$4 billion (Devlin et al, 1997). This estimate includes reduced and lost production time from consumption and mortality, the cost of treating alcohol related disease, and ACC and policing costs. Other costs of alcohol abuse include: relationship discord, unsafe sexual behaviour and unwanted pregnancy, negative influence on children's psychosocial development, and domestic violence (Orford, 1994).

Social harm

In 1994 more than 20,000 women and children sought help at Women's Refuges; alcohol was said to be involved in the majority of cases (in Te Puni Kokiri and Kaunihera Whakatupato Waipiro o Aotearoa, 1995). In the New Zealand general population 21 percent of males and 26 percent of females experience harmful effects on their home life as a result of others' drinking

(Wyllie, et al, 1996). In addition, it is well known that there is a strong association between alcohol intoxication and trauma. Approximately half of all non-fatal falls seen in medical settings are alcohol related (Hingson and Howland, 1987).

Alcohol and mortality

In 1989, 93 percent of all non tobacco-related substance abuse deaths were attributed to alcohol (Adams et al, 1992). And in 1997 alcohol was implicated in 27 percent of fatal road crashes and 15.5 percent of accidents causing injury (LTSA, 1997). Among Maori, alcohol-related deaths are more than 2.5 times that of non-Maori (Pomare, 1995)

The relationship of alcohol to mortality has been identified as "J" shaped, i.e. abstainers have slightly higher mortality rates than moderate drinkers, and the mortality of heavy drinkers is much higher than that of both the former groups (Poikolainen, 1995). Moderate alcohol intake is associated with lowered risk of coronary heart disease among middle aged males (Makela, 1997).

Alcohol and physical harm

As the level of alcohol consumption increases so does the risk of numerous preventable illnesses.

Table 1: Effects of overuse of alcohol

Physical effects of overuse of alcohol

- arrhythmia
- elevated blood pressure
- increased risk of cancers of the stomach, oesophagus, larynx, oropharynx, liver and breast
- sexual dysfunction /disinterest
- liver cirrhosis
- peripheral neuropathy
- cardiomyopathy
- gastritis
- stroke - especially subarachnoid haemorrhage
- low grade hypertension
- pancreatitis
- stomach or duodenal ulcer
- degenerative changes in the brain

Alcohol use and psychological problems

The DSM-IV identifies a number of substance-induced disorders that cause a variety of symptoms characteristic of other mental disorders. These include substance-induced:

- anxiety disorder
- depression
- sleep disorder
- suicide and suicide attempts
- sexual dysfunction
- severe memory impairment
- cognitive deficits
- morbid jealousy
- rage states
- paranoia
- delirium

Indeed, overuse of alcohol can adversely affect nearly every organ system of the human body. Non-dependent drinkers account for the majority of people with alcohol-related problems. This is simply because they form a greater proportion of the population than do dependent drinkers (Mosher and Jernigan, 1989). Non-dependent but problem drinkers are most likely to benefit from early intervention in primary care, thereby reducing the overall physical and social harm in the population.

Alcohol and pregnancy

The most vulnerable time during pregnancy for risks of birth defects is in the first eight to twelve weeks. Pregnant women who consume alcohol risk neonatal problems including lower birth weight, slowed psycho-motor development, or foetal-alcohol-syndrome (FAS) (O'Hagan et al, 1993). FAS is the leading known cause of mental retardation in the western world, exceeding Down's syndrome and cerebral palsy (Wheeler, 1993;Duerbeck, 1997). Children with milder foetal-alcohol effects tend to present later with a specific profile of learning difficulties, attention and behavioural problems (Marks, 1996).

Alcohol and young people

Experimentation with alcohol and drugs is a normal part of adolescent development. However, 10 to 30 percent of all young people experience substance use problems that have significant effects later in their lives (Brown et al, 1996). Young people are more likely to have abuse rather than dependency disorders, and are less likely to appreciate the need for treatment. Lack of inhibition caused by excessive use of alcohol puts young people at risk of sexually transmitted diseases (STD) and unwanted pregnancy.

Young people are more likely than adults to use alcohol in conjunction with other drugs. Psychiatric disorders such as schizophrenia also begin in adolescence. Attention to psychiatric disorders in the treatment of adolescent substance abuse is vital. References that may be helpful in treating substance abuse among young people include Cogswell (1985) and Bukstein (1994)

The effects of alcohol withdrawal

Alcohol withdrawal is a potentially fatal condition. The first symptoms can occur within hours of cessation of drinking and reach a peak within 24 to 48 hours. Historically, delirium tremens has had a death rate of about 20 percent, but with careful management and treatment the

death rate from withdrawal is likely to be 5 percent or less (Mattick and Hall, 1996). A sudden cessation or abrupt reduction in previously heavy and prolonged drinking can result in the following:

- autonomic hyperactivity (e.g. sweating, or pulse rate greater than 100)
- increased hand tremor
- insomnia
- nausea or vomiting
- transient visual, tactile or auditory hallucinations or illusions
- disorientation, confusion, clouded consciousness, impaired attention
- psycho-motor agitation
- disturbed sleep
- anxiety
- grand mal seizures.

Recommended limits for safe alcohol consumption

Alcohol use and its associated problems fall along a continuum of severity. At one end are low level consumers who are free from harm. At the other end are the highly dependent who suffer multiple adverse medical and social consequences.

Guidelines for safe or moderate consumption are based on the standard drink containing the equivalent of 10 grams of ethanol. The rule of thumb is that consumption of over 21 standard drinks per week for men and 14 for women places the drinker at risk of harmful physical effects. Such consumption also increases the risk of developing tolerance to alcohol and a possible state of dependence.

The New Zealand drinking pattern tends toward binge drinking. The guide for safe levels of consumption on any one occasion suggests no more than 6 standard drinks for men and 4 for women.

These are general guidelines and may not be safe for all people at all times. Factors that will influence safe levels of drinking are: family history of alcoholism, various types of medication, current health status, pregnancy, age and weight.

ALAC website: advice on safe drinking levels: www.alcohol.org.nz

The Alcohol Helpline: 0800 787 797

Table 2: The number of standard drinks in typical servings:

Servings: one standard drink is equivalent to 10 grams of ethanol	Standard drinks
1 can or stubbie of beer (at 4 percent)	1.5
1 pint of beer (a 'handle')	2
1 jug of beer	4
1 pub measure of spirits (whisky, gin, vodka)	1
1 glass of table wine	1
1 bottle of spirits	25
1 bottle of table wine	7.5
1 glass of fortified wine (sherry, martini, port)	1
1 bottle of fortified wine (sherry, martini, port)	11.5

Table 3: Percentage of the general population with recent* alcohol disorder in the last six months

Sex	Age (years)	N	Alcohol abuse only	Alcohol dependence with or without abuse	Alcohol disorder (abuse and/or dependence)
Men	18-24	71	11.9	8.6	20.5
	25-44	265	6.6	6.4	13.0
	45-64	168	5.4	5.9	11.3
	Overall 18-64	504	7.4	6.7	14.1
Women	18-24	187	2.7	1.7	4.4
	25-44	590	1.4	1.4	2.8
	45-64	217	0.2	0.9	1.2
	Overall 18-64	994	1.3	1.3	2.6
Men and women	Overall 18-64	1498	4.3	4.0	8.3

* 'recent' means met DSM-III criteria for an alcohol disorder in the last six months
 Source: Christchurch Psychiatric Epidemiology Study, adapted from Wells (1991)

Prevalence of alcohol abuse in New Zealand

More than one New Zealander in six drinks above the generally accepted safe level (Ministry of Health, 1999). Approximately 16 percent of all general practice patients are likely to engage in risky drinking behaviour (Paton-Simpson et al, 1999; Chivers, 1997; McMenamin, 1997). Among these risky drinkers are those who have an alcohol disorder, either an abuse or dependence syndrome (see page 18 - DSM IV disorder definitions). Within the last six months about one in twenty New Zealanders will have had an alcohol abuse syndrome, and one in twelve a dependency syndrome (Oakley-Browne et al, 1989).

Gender differences

Men are about 5 times as likely as women to have an alcohol disorder.

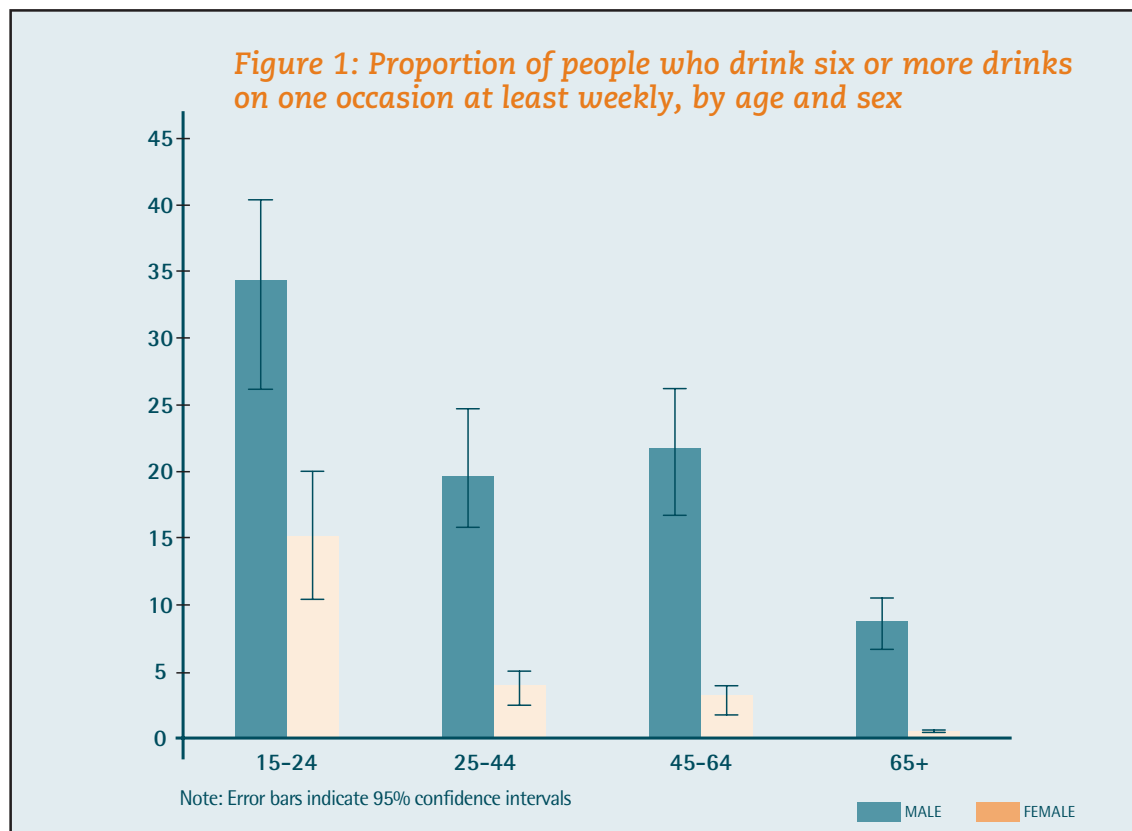
In New Zealand 14.1 percent of men and 2.6 percent of women have had a diagnosable alcohol disorder in the last 6 months (Oakley-Browne et al 1989). Although age differences in rates of disorder are generally small and sex differences are large, no group is free of problems or risks. (See table 3)

Men are more likely than women to drink more frequently, to drink more heavily on a typical day when drinking, and to drink six or more drinks on one occasion at least weekly (Ministry of Health, 1999).

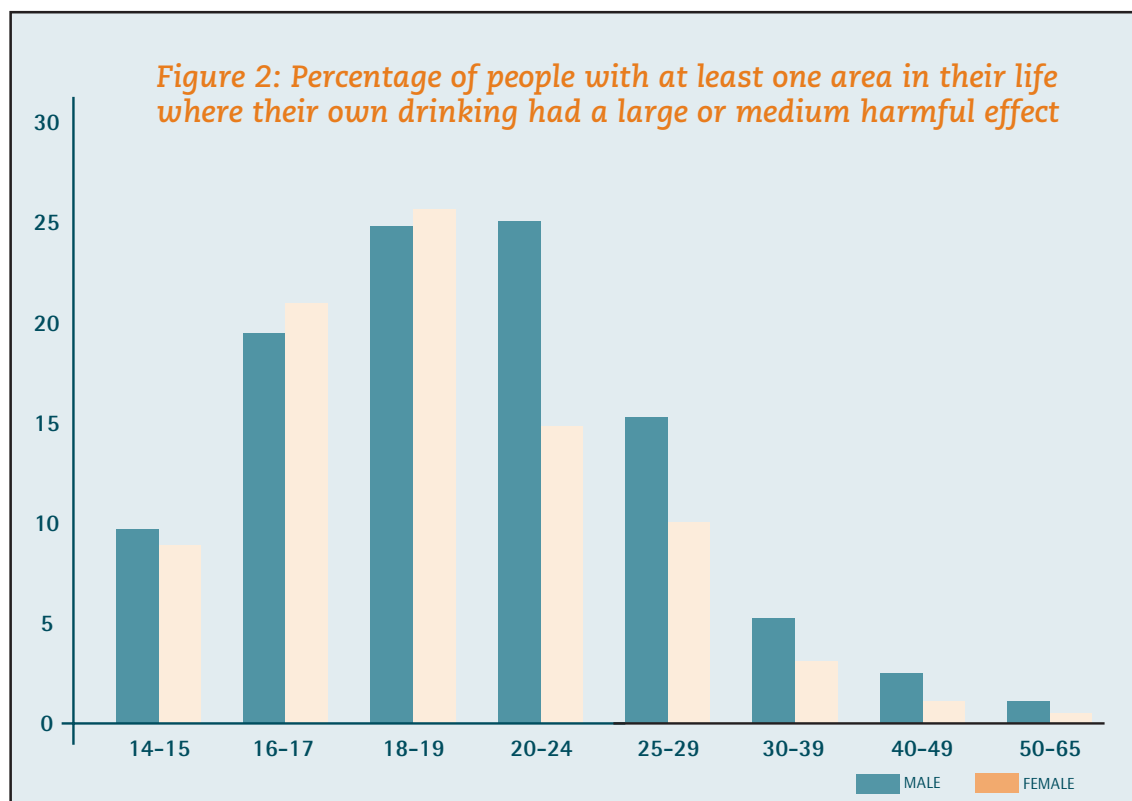
Age differences

Young people, especially men, are most likely to drink in a manner which puts them at high risk of alcohol-related problems. The amount consumed on a typical drinking occasion is greatest among men and women aged 15-24

(Ministry of Health, 1999). Approximately 30 percent of people under the age of 25 years in the general practice population have either hazardous or harmful patterns of drinking. This reduces to less than 5 percent among those over 65 years (Paton-Simpson et al,1999).



Figures from Wyllie et al, 1996



Figures from Wyllie et al, 1996

Cultural differences in drinking patterns

Maori

The median consumption for Maori men was 613 cans of beer per annum compared with 500 for men in the general population (Dacey, 1997). Patterns of consumption also appear to differ between Maori and the general population; more Maori abstain completely, and those who do drink, do so less often but consume more. (Wyllie et al, 1996). Maori adults were most likely to indicate a hazardous pattern of drinking when screened. They drank five or more drinks on a typical day when drinking and drank six or more drinks on one occasion at least weekly (Ministry of Health, 1999).

Pacific Island peoples

In the 1996–97 Health Survey, over half of all Pacific adults reported no alcohol intake in the previous year. When they do drink, Pacific drinkers tended to drink more on a typical day than European/ Pakeha drinkers. Over a third of Pacific drinkers had an AUDIT score of eight or more, indicating a hazardous level of drinking (Ministry of Health, 1999). A qualitative study involving six Pacific communities in New Zealand reported that for many of the participants there was “a lack of attention or recognition given to the concept of moderate drinking” (Alcohol Advisory Council, 1997).

What can be done?

There are large numbers of people in New Zealand who drink well in excess of the recommended consumption levels. Such consumption causes immediate problems and lays the ground for problems later. This is the population that can benefit from brief interventions by primary care practitioners.

Young people are establishing patterns of alcohol consumption. The effects may not become apparent till later in life. While the evidence for problems relating to cannabis misuse may be less robust, the drug's widespread use in New Zealand calls for increased awareness on the part of primary health care workers. The following sections focus on alcohol and make evidence-based recommendations for screening, assessment and brief interventions to influence drinking behaviour.

Brief interventions in the primary care setting can be effective in reducing alcohol consumption (Richmond and Anderson, 1994). More intensive treatments are available for the alcohol-dependent patient through specialist alcohol and drug services. Patients requiring such attention should be referred on by the primary care practitioner. Although the available evidence for the efficacy of the brief intervention strategies to be discussed relates mainly to alcohol, the same approach is widely thought to be applicable to cannabis use (CSAT, 1997).

Cannabis use in New Zealand

Cannabis is the third most popular drug in New Zealand, after alcohol and tobacco. Experimentation with cannabis begins earlier than age 18, with many having tried it before the age of 16. In a recent (1998) drug use survey, fifteen percent of New Zealanders aged 15 to 45 described themselves as current users. Among men and women aged 18-19, 34 percent and 19 percent respectively described themselves as current users. A 'current user' was defined as a respondent who had used cannabis in the last 12 months and said they had not stopped using it.

Only 24 percent of those who had tried cannabis had used the drug more than twice in the past 12 months. Only 1 percent in the 15-45 age group were daily users (Field and Casswell, 1999; Poulton et al, 1997).

Physical effects of cannabis use

The primary psychoactive ingredient of cannabis, delta-9-tetrahydrocannabinol (THC), and its metabolites have a relatively long half-life in the body. They may be detectable in the blood for several days, or in trace amounts for several weeks following ingestion (Hall, 1994). Frequent use (e.g. daily) may lead to a build-up of THC in the body and increase the risk of subsequent problems.

The acute toxicity of cannabis is very low. No confirmed reports of human deaths attributed to cannabis poisoning have appeared in the medical literature (Ali and Christie, 1994). Indeed, the animal literature suggests that it would be difficult for a human to achieve a lethal dose by smoking or eating cannabis (Grinspoon and Bakalar, 1993).

Generally the negative physical effects of smoking cannabis are similar to smoking cigarettes. Heavy use is likely to increase the risk of developing chronic bronchitis and respiratory cancer, especially as many cannabis smokers also smoke tobacco (Ali and Christie, 1994).

Animal studies have reported adverse reproductive effects in both males (lowered level of testosterone, reduced sperm production, viability, and motility) and females (disruption of ovulatory cycle). Despite the lack of clear evidence of significant effects among humans, the possibility of such effects may be of particular concern to people whose fertility is already impaired for other reasons (Ali and Christie, 1994).

There is some evidence that cannabis use during pregnancy may impair foetal development

Table 4: Physical, psychological and social effects of cannabis abuse

Physical effects	Psychological	Social
<p>cannabis smoke irritates the nasopharynx and bronchial lining so increases risk of</p> <ul style="list-style-type: none"> chronic cough other nasopharyngeal pathology <p>heavy use may result in</p> <ul style="list-style-type: none"> sinusitis pharyngitis bronchitis with cough emphysema pulmonary dysplasia possible increased risk of developing malignant disease 	<ul style="list-style-type: none"> anxiety irritability mental lethargy depression suicide paranoid ideation including <ul style="list-style-type: none"> -suspiciousness -delusions -hallucinations depersonalisation derealisation short term memory impairment appetite disturbance sleep disturbance substance induced anxiety disorder, mood disorders etc. reduced motor skills 	<ul style="list-style-type: none"> relationship problems possible increased risk of accidental injury work problems school problems legal problems, possession reduced ability to perform complex tasks

Source: DSM -IV

leading to lower birth-weight, possibly a result of foetal hypoxia as with cigarette smoking (Public Health Group, 1996; Abel, 1985, cited in Hall, 1994). Associations have been found between cannabis use by pregnant women and cancer in their children (Robison et al, 1989; Grufferman et al, 1993).

Psychological effects of cannabis

The pleasurable 'high' which is the desired result of cannabis use includes mild euphoria, relaxation, altered sensory perception, and altered perception of the passing of time. An intensification of sensory experiences such as listening to music, watching films, or eating may occur. These mental changes are accompanied by increased heart rate, changes in blood pressure (increased if the person is standing, decreased if they are sitting), and often increased appetite and dry mouth. Cannabis use can also produce undesired effects such as anxiety, panic or unpleasant feelings. An acute psychotic reaction can occur in rare cases; generally at very high doses and/or in naive users (Hall, 1994). These effects resolve over time.

The level of consumption likely to cause physical or psychological harm in otherwise healthy adults is not clear. Evidence suggests respiratory disease, subtle cognitive deficits, an amotivational syndrome, and precipitation of latent psychoses associated with chronic cannabis use (Ali and Christie, 1994).

Cannabis intoxication impairs perceptual-motor co-ordination, short term memory and attention. Slowed reaction time and information processing also result. Impairment increases with dosage. These effects may influence an individual's ability to perform complex tasks such as driving or operating machinery. Studies of simulated and 'on-road' driving indicate some impairment of performance following cannabis use. However, compared with alcohol intoxicated drivers, those using cannabis tend to drive more slowly and take fewer risks - possibly as a result of being more aware of their impaired ability. When used together the effects of alcohol and cannabis on psychomotor performance are additive (Hall, 1994). Of those people who had used cannabis 18 percent 'always' combined its use with alcohol, 16 percent 'mostly' did, and 25 percent 'sometimes' did (Field and Casswell, 1999).

The degree of impairment resulting from the combined use of alcohol and cannabis needs to be borne in mind in discussions of cannabis use and driving.

Long term cannabis use produces subtle impairments of cognitive functioning which persist beyond the point of intoxication. A comprehensive review of the literature concludes: *The weight of evidence suggests that the long term use of cannabis does not result in any severe or grossly debilitating impairment of cognitive function. However, there is clinical and experimental evidence which suggests that the long term use of cannabis produces more subtle cognitive impairments in specific aspects of memory, attention, and the organisation and integration of complex information* (Hall, 1994:143).

This is of particular concern for young people whose educational performance and psychosocial development may be negatively affected (Pope and Yurgelun-Todd, 1996; Block, 1996).

Long term cannabis use can result in a cannabis dependence syndrome. Users become tolerant to the drug and need increasing doses to achieve the same effect or develop withdrawal symptoms on reducing intake. Withdrawal symptoms tend to be mild and relatively short-lived, and only occur following cessation of very heavy consumption over a prolonged period. Withdrawal effects include loss of sleep, paranoia, sweating, anxiety, loss of appetite, tremors, irritability and general physical discomfort.

While cannabis use may cause an acute psychotic episode especially at high doses in naive users, there is little convincing evidence to support the notion of 'cannabis-induced psychosis' that persists once the drug use stops (Hall, 1994). Cannabis use by people with schizophrenia or bipolar disorder is strongly associated with poorer treatment compliance, higher levels of stress and markedly increased rates of relapse of their psychotic disorder (Linszen et al, 1994; Martinez-Arevalo et al, 1994).

- Intervene to reduce cannabis use among those with psychotic disorders wherever possible
- Explain the problem of cognitive impairment to young people
- Ask about cannabis use among heavy drinkers and about drinking behaviour among cannabis users

Screening for substance abuse in general practice

Why screen?

Screening will help to identify the appropriate course of action: brief intervention or referral to specialist services.

The screening process provides a discussion framework within which questions may be raised and information on substance use issues given. For many people just the process of having a health professional raise the issue of their substance abuse is sufficient to instigate a positive change in their behaviour.

Screen patients routinely

Because of the proven effectiveness of early intervention there is an emerging consensus that all patients in the primary care setting should be screened periodically and routinely (McCormick et al, 1999; CSAT,1997; Institute of Medicine,1990). As hazardous and harmful use is unlikely to be obvious, we suggest a systematic screening regime.

We recommend that all patients over the age of 14 years be screened at least every three years.

Screening for alcohol-related problems entails asking a set of simple questions. If problems are present a more comprehensive assessment is warranted. Broad screening maximises the possibility of early detection and intervention to treat existing problems or prevent the development of potential problems.

What to screen for

Screening is useful in the primary health care setting if the problem screened for is:

- prevalent in the general population
- diminishes the duration or quality of life
- has an effective treatment available that reduces morbidity and mortality
- is detectable via cost-effective screening earlier than without screening

- avoids large numbers of false positives or false negatives
- is detectable and treatable early enough to halt or delay disease progression and thereby improve outcome. (CSAT, 1997)

Screening for substance abuse meets all of these conditions and can be included among routine lifestyle questions (e.g., diet and exercise) asked of all patients.

People who experience problems associated with their substance use are not necessarily dependent and may not volunteer information without prompting. Many may not have fully considered their substance use. They may not have been adequately informed about how their consumption compares with recommended limits, and the potential dangers of overuse. Screening and identifying an individual with possible substance use problems or hazardous consumption creates an opportunity to address the issues and review the effects.

In addition to the regular three yearly screening, people showing "red flag" risk factors which may be associated with substance use should be screened whenever they present. These signs include:

- accidents / trauma
- psychological/psychiatric problems
- family or relationship problems
- employment problems (e.g. absenteeism, deteriorating performance)
- involvement in crime: any violent crime; theft; embezzlement
- sexual dysfunction
- sleep problems
- abnormal liver function

Young people as a group have high rates of risky substance use. Men between the ages of 14 and 29 years and women between the ages of 14 and 24 years should be screened, using age-appropriate questions, whenever they present.

Pregnant women must be informed of the hazards to the foetus associated with alcohol use during pregnancy.

How to screen

Sensitivity is required as many questions relating to substance use can feel like a moral rather than a health issue. Putting the substance screen within the context of a general health review can be more acceptable to patients rather than singling it out as a specific issue (Allen et al, 1995, cited in CSAT, 1997). It was also the preferred option of the majority of GPs who participated in an evaluation study of the WHO 'Drink-less' brief intervention package conducted in Auckland (Lightfoot et al, 1998). A screening 'instrument' such as the AUDIT will not be appropriate for all ages. Young people may not be able to relate to all the questions. It may be more fruitful to incorporate some screening questions into a medical history.

Include screening questions within the context of a general health review. This is more acceptable to patients and lessens the problem of substance abuse feeling like a 'moral' rather than a health issue.

It is important for the health professional to keep their professional role separate from their personal substance use. Possible concern (or lack of concern) over one's own alcohol intake, for example, should not impinge on the need to address potential substance use problems in the patient population.

The primary health care professional can either: ask a number of questions designed to elicit information about substance use, or use an existing test such as the AUDIT. This can be administered in the waiting room by a practice nurse or by the GP him/herself. It is important to be sensitive to different literacy levels. For patients whose second language is English or those with poor literacy skills, time must be taken to explain and to assist the patient in completing a screening test. The general information that should be sought in any screen for substance use is:

- type of substance(s) used
- amount and frequency of use
- possibility of dependency
- problems resulting from substance use

Types of screening instruments

We recommend the AUDIT for screening adults for alcohol problems

The Alcohol Use Disorders Identification Test (AUDIT) combines the virtues of brevity, validity, and ease of administration. It is important to remember that screening does not constitute a full assessment or diagnosis. It is merely a way of identifying individuals who are likely to have an alcohol problem.

The AUDIT (Saunders, et al, 1993) is a 10-item screen which can be used in an interview situation or given as a pencil and paper test. It looks at alcohol consumption, drinking behaviour and alcohol related problems in an effort to identify possible harmful or hazardous alcohol consumption. The AUDIT takes around 2 minutes to complete and less than a minute to score. The scoring system produces an overall score between 0-40. A score of 8 or above indicates a possible alcohol problem. It also has three subscale scores which give measures of harmful drinking, hazardous drinking, and symptoms of dependency.

The AUDIT has been validated cross-nationally and its sensitivity and specificity (92 percent and 93 percent respectively) are similar across disparate cultures. However, no validation studies have been carried out with Maori or Pacific Island populations.

The reader is referred to the 'Drinkless' package available from the Goodfellow Unit, Auckland University School of Medicine. This package contains AUDIT questionnaires, a scoring sheet and pamphlets for patients.

NB: For questions pertinent to cannabis use see Appendix Two.

Assessment and diagnosis

Patients may not come in expecting or looking for help with substance use problems. They may not want to talk about their substance use, let alone believe they have a problem, or want to change in any way. Alternatively, some may be aware they have a problem and all that is required is a concerned professional to provide them with a 'motivational nudge' (Miller and Rollnick, 1991).

Initiating discussion

It is important to approach the topic of substance abuse by avoiding labelling, confrontation and giving advice (Miller and Rollnick, 1991). There are a few simple strategies that will facilitate meaningful discussion from the outset:

1. careful listening and accurate understanding of the patient's concerns are the keys to establishing trust and empathy
2. use open-ended questions to explore the relationship between the patient's presenting problem and the topic of their substance use, and
3. ask questions in a matter-of-fact manner. The subject of substance use should be introduced as a natural and routine part of discussion.

Open-ended questions

- Tell me about your use of alcohol; what effect does it have on you?
- What do you enjoy about drinking?
- What concerns do you have about your use of alcohol?
- I wonder where your use of alcohol fits in here?

Questions likely to lead to resistance and denial

Confrontational strategies do not lead to successful outcomes. Closed questions are likely to lead to resistance:

- You drink a lot don't you?
- It seems like you have a problem with alcohol. Don't you agree?
- Don't you think that your alcohol habit is a big cause of this problem?
- What about your family, do they think you ought to quit drinking?

The brief assessment

Substance use history

After initiating discussion of substance use it may be necessary to take a drinking/drug use history, i.e. how much and how often the person drinks or uses, as a foundation for a brief assessment (ALAC, 1996).

This history should cover the following areas:

- frequency of drinking/drug taking
- quantity consumed
- pattern of consumption (i.e. binge, continuous)
- situational triggers
- duration of hazardous or harmful drinking/drug taking
- previous attempts to stop or cut down
- adverse consequences of substance use on family, work, social relationships, and health
- loss of control when using primary substance
- the patient's perception of his or her substance use, both the need and perceived ability to change behaviour, e.g. 'do you think your alcohol use is a problem?' (Samet, Rollnick and Barnes, 1996)

Begin with a statement such as *obviously you enjoy drinking*. What do you enjoy about drinking? Then for example . . .

1. *In a typical week*
 - *On how many occasions would you drink alcohol?*
 - *How many drinks would you have?*
2. *How many times in the last year have you had more than six drinks?*
3. *Has drinking alcohol ever caused problems for you?*
4. *Have you ever been admitted to hospital because of an accident? How often?*
5. *Has any close relative had alcohol problems?*
6. *Would you get along better with a spouse/partner or close friends if you drank less?* (O'Hagan et al, 1993).

This brief assessment gives an indication of the severity of the problem and may lead to an in-depth assessment and brief intervention.

In-depth assessment

If, following a brief assessment, the health professional concludes that the patient has a drinking problem or is dependent on alcohol it is important to assess the problem(s) more fully. In-depth assessment guides treatment planning. It should:

- gather full information about the use of a substance(s)
- determine the severity of the substance use
- check for poly-substance use/misuse
- check for psychiatric comorbidity
- encourage patients to assess and monitor their own use of alcohol and drugs
- determine the patients readiness to change

(see Appendix Three for 'readiness to change questionnaire')

Conducting an in-depth assessment

Get the consent of the patient to explore their substance use in more depth. e.g.,

From what we have discussed so far, I am concerned about the amount of alcohol/cannabis you consume and the possible impact it may be having on your health. I would like to look more closely at this with you at another appointment. Would you be interested in a further assessment?

It is useful to suggest they keep a diary of their substance consumption in the interim.

Cultural considerations

The clinician should aim to recognise and work within the limits of their expertise, and seek the assistance of others with appropriate knowledge as required.

Cultural difference is an important consideration in the process of assessment. Differing beliefs, assumptions, values and communication styles may impede effective communication and result in 'talking past each other' (Lux et al,1993). Inadequate levels of cultural awareness have been identified as a factor limiting the delivery of effective services to Maori (Waldon et al,1996). For non-Maori working with Maori, the involvement of whanau or people with requisite cultural expertise should be considered when conducting an in-depth assessment.

Tools of assessment

The following may help to gain a full picture of their situation.

- Substance use diary
- Clinical interview
- Blood tests to detect physiological effects of the substance
- Assessing readiness to change (see Appendix Three)

Substance use diary

The diary will enable the individual to keep a more accurate report of:

- substance(s) consumed
- the amount consumed
- situational triggers, both emotional and external

Clinical interview

A full substance use history will enable the practitioner to tailor their intervention to the needs of the patient.

History

Personal history - developmental milestones, school, work, sexual, marital history

Family history - parents' and siblings' age, relationship with patient, history of substance abuse

Substance consumption - how much in the last year, 6 months, week

Substance career - when use started, withdrawal symptoms

Substance related problems

Other substance use - quantity, method of consumption

Abstinent periods - reason, duration, perceived support

Previous treatment history - when previous treatment undertaken, method of treatment

Forensic history - charges, convictions, imprisonment

Occupational history - relationship of substance(s) use to job

Sexual history - STD risk behaviour, needle sharing, unprotected sex, risk of pregnancy

Marital history - general problems, sexual functioning problems

Present life situation - family/social supports, friends, job prospects

It is important to try and ascertain the risk of harm to self or others (including suicide and suicide ideation, and risk with driving)

Blood testing

Biochemical testing should be limited to cases where there is concern that the levels of alcohol consumption may have resulted in organic damage. General practitioners may wish to undertake tests to determine Gamma GT, MCV or AST. These tests may be useful for giving feedback to patients about elevated levels compared to norms, and providing concrete 'value free' evidence of a possible alcohol use problem.

Specific assessment issues

Physical and sexual abuse

The experience of sexual abuse is associated with an increased risk of substance abuse (and other psychological problems) (Finklehor, 1990; Triffleman et al, 1997). It may be useful to determine if there is any history of abuse or current abuse.

Comorbidity

In New Zealand people with alcohol disorders were 1.9 times more likely than those without to have another mental disorder. The association between alcohol and other disorders was by far the strongest for antisocial personality disorder (odds ratio 12.7) and drug abuse/dependency (odds ratio 7.2). Other disorders also showed elevated levels of risk when associated with alcohol disorders; major depression, dysthymic disorder, and schizophrenia all had reported odds ratios of 1.5. (Wells et al, 1992; Bushnell et al, 1994).

Some depressive or anxiety syndromes may be alcohol induced (Schuckit, 1995). Following up patients for about 1 month after abstinence will determine whether the symptoms are resolving in the absence of alcohol. If depression or anxiety persist it may indicate an independent disorder requiring further treatment.

Assessment issues with young people

Confidentiality issues can arise when primary care practitioners are treating young people who are still dependent on their parents.

Parents do not have an automatic right to all information about their mature children. The Health Information Privacy Code, 1994 adopts an understanding-based test for young peoples' right to non-disclosure of personal information. Their views should be ascertained and considered in respect to disclosure of personal information (Ministry of Health, 1998).

When a child/young person does not wish information from a consultation disclosed to their parents, the situation must be judged on a case-by-case basis. Where it is clearly appropriate (in terms of the individual's safety and support needs) the practitioner should discuss the matter with the child/young person and encourage (not coerce) them to involve their parents. In some situations it may be important for the practitioner to disclose the child's condition to others in order to keep the child safe (suicide attempt or child abuse, for example).

The situation has not been tested in court. But it is likely that the child/young person's treatment and consent rights (under the Code of Health and Disability Services Consumers' Rights and common law and their privacy rights under the Health Information Privacy Code) enable them to be advised and treated without their parents being involved.

Sometimes a practitioner will have the role of encouraging parents to accept the value of their young person's autonomy and independent relationship with their health practitioner.

Diagnosis of alcohol abuse and dependence

If initial screening and assessment suggests that the person engages in harmful or hazardous use of alcohol, it is useful to identify and refer patients with alcohol dependence. This draws attention to the risk of a withdrawal syndrome if alcohol consumption reduces suddenly or ceases altogether. The American Psychiatric Association's classification system (DSM-IV) spells out the criteria for two syndromes: Alcohol Abuse and Alcohol Dependence.

Alcohol Abuse: The essential features of the abuse syndrome are:

A maladaptive pattern of alcohol use causing clinically significant distress or impairment of social or occupational functioning.

Maladaptive use will include high daily consumption (e.g. 7 drinks or more each day for men, 5 or more for women), regular heavy weekend drinking, binge drinking (staying drunk for days, often after periods of abstinence).

One or more of the following must have occurred as a result of recurrent alcohol use within a 12 month period:

- 1 **failure to fulfil major role obligations** e.g. repeated absences or poor work performance related to alcohol use; suspensions, or expulsions from school; neglect of the children or household.
- 2 **exposure to physical hazards** e.g. driving an automobile or operating a machine when impaired by alcohol use.
- 3 **legal problems** e.g. arrests for alcohol-related disorderly conduct.
- 4 **social or interpersonal problems** e.g. arguments with partner about consequences of intoxication, physical fights whilst drunk.

A diagnosis of an abuse syndrome is not made if the person is dependent on alcohol.

Alcohol Dependence: The key features of the alcohol dependence syndrome are:

A maladaptive pattern of alcohol use leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12 month period:

- (1) **tolerance**, as defined by either:
 - (a) a need for markedly increased amounts of alcohol to achieve intoxication or the desired effect
 - (b) continued use of the same amount of alcohol with markedly diminished effect
- (2) **withdrawal**, as manifested by two or more of the following occurring after cessation or reduction of heavy prolonged alcohol use:
 - (a) autonomic hyperactivity such as sweating or heart rate in excess of 100 beats per minute
 - (b) hand tremor
 - (c) nausea or vomiting
 - (d) transient visual auditory or tactile hallucinations
 - (e) psychomotor agitation
 - (f) anxiety
 - (g) grand mal seizures
- (3) alcohol is consumed in larger amounts or over a longer period than was intended
- (4) there is a persistent desire or unsuccessful efforts made to cut down or control alcohol use
- (5) a great deal of time is spent in activities necessary to obtain alcohol, consume it, or recover from its effects
- (6) important social, occupational or recreational activities are given up or reduced because of alcohol use
- (7) alcohol use is continued despite a physical or psychological problem that is likely to have been caused or exacerbated by the substance.

TREATMENT:

Treatment plan

A treatment plan will include achievable steps for the individual and will recognise that:

- motivation may fluctuate
- relapse is normal and does not signal failure
- progress may be slow

When to refer

- severe dependence
- history of failed primary care treatment
- comorbid psychiatric disorders
- risk of harm to self or others
- danger of withdrawal syndrome
- poly substance abuse
- lack of social support structure

Psychological treatments

Psychological therapies generally fall into two groups: therapies which involve the family or social environment of the drinker, and therapies derived from learning theory.

Family/social environment approaches include marital and family therapy and social skills training and a variety of therapeutic community strategies such as the Minnesota Model, Community Reinforcement Approach (CRA), and twelve step programmes such as Alcoholics Anonymous (discussed below)

Learning theory approaches are generally incorporated into cognitive-behaviour therapy, and include cue exposure, behavioural self control and relapse prevention.

For further information about the basis of Cognitive Behaviour Therapy, the reader is referred to the National Health Committee's earlier guideline on assessing and treating anxiety.

Alcoholics Anonymous, Marijuana Anonymous

Alcoholics Anonymous (AA) is based on the principle that addiction is a disease and that abstinence is the only appropriate goal. AA uses a buddy (sponsorship) system and members are strongly encouraged to attend AA meetings regularly. Al-Anon and Alateen are associated organisations which provide education and support for the spouses and families of people with substance use problems. Two large-scale controlled trials examining the effectiveness of 12-Step approaches have found that subjects perform as well with 12-Step treatment as with Cognitive-Behaviour Therapy (Ouimette et al,

1997; The Project Match Research Group, 1997).

The AA approach does not suit everyone, and there is lower acceptance among women, who appear to benefit less than men. Possible explanations for this include a preference among women for one-on-one counselling rather than group treatment (Jarvis, 1992). The co-occurring disorders which are more prevalent in women (e.g. depression) are not explicitly addressed in AA programmes (Tonigan and Hiller-Sturmhfel, 1994).

Twelve step programmes, Cognitive Behaviour Therapy and Motivational Interviewing appear equally effective for people with alcohol dependence. We recommend referring dependent drinkers and offering brief intervention using Motivational Interviewing for patients with problem drinking patterns.

Brief intervention should be used with all people identified by screening as non-dependent but drinking more than the safe level of alcohol

Brief intervention: a window of opportunity

While brief intervention does not assist everyone with an alcohol problem, it has been proven to substantially increase the likelihood of reduced alcohol consumption among heavy drinkers. Its ease of administration, low intensity, and low cost make a strong argument that it should be readily available in primary healthcare.

General practice is the ideal environment for early intervention: a single brief intervention is sometimes all that is required to bring about change (Sobell et al, 1996); patients expect their GPs to give advice about health and lifestyle (Wallace et al, 1987); people with alcohol-related health problems see their doctor frequently.

Brief intervention is a high frequency, low involvement intervention. It seeks to encourage patients to reduce or eliminate alcohol or other drug consumption and so avoid or minimise associated problems. Risky drinking may be altered through early detection, brief advice and negotiating change. Many people do not recognise their substance use as problematic. Their presentation in primary care for whatever reason constitutes a 'teachable moment' (CSAT,1997).

Components of brief intervention

A typical brief intervention takes about five minutes. The patient's current substance use is briefly assessed (where do they fall along the spectrum of use?); feedback from the assessment is given (how their current use compares with norms and recommended limits); and simple advice is given on responsible levels of consumption.

The aim of the intervention will vary according to the patient's current readiness to change. The aim may be to raise the patient's awareness of the negative consequences of their behaviour, to increase their ambivalence about the behaviour, or to help them devise a plan to change their behaviour.

Tools for effective brief interventions

Patients should be actively involved in the therapeutic process. The six critical principles are summarised by the acronym FRAMES (Millar and Sanchez, cited in Bien et al, 1993)

F Feedback of personal information; current health status (e.g., results from the AUDIT or from blood tests)

For example,

The results of your assessment show that your current rate of alcohol consumption is at a hazardous level. As you can see from the questionnaire you filled out, you are drinking a dangerously high amount, and the blood tests we did last week show that this is beginning to cause damage to your liver.

R Responsibility; emphasising the patient's personal responsibility for the change

For example,

Nobody can decide for you, and no one can change your drinking if you don't want to change.

A Advice; giving clear advice may involve promoting total abstinence, advice to reduce drinking to safe levels or advice to seek further treatment from specialised counsellors.

M Menu; offering patients a menu of alternative strategies emphasises perceived control and personal choice which may lead to a greater commitment to change.

E Empathy is a potent determinant of patient motivation and change.

S Self-Efficacy; the practitioner's belief in the patient's ability to change can also influence recovery.

Continuing to address the problem in follow-up visits helps ensure a positive outcome.

(Wallace, Cutler and Haines, 1988 cited in Bien et al 1993).

Evidence for the effectiveness of brief interventions

There is strong evidence that brief intervention in the primary care setting is a powerful and effective tool in influencing the behaviour of heavy drinkers. This evidence is summarised in Appendix Four.

The process of behavioural change

A practitioner's style can influence a patient's motivation to change. *Readiness to change* will fluctuate. It is not a stable personality characteristic. The health professional's task is to identify the patient's current state of readiness to change and act appropriately. People pass through stages in the process of changing (see Figure 2).

Two common strategies used to help people move from the precontemplative or contemplative stages to preparation and action are: motivational interviewing and concerned confrontation (Miller and Rollnick 1991; O'Hagan et al, 1993).

Motivational interviewing

Motivational interviewing aims to assist the patient to explore ambivalence about their substance use, leaving them to come to their own conclusion about its harmfulness, and leading to greater commitment to change. The health professional adopts an empathic approach with low key reflection of discrepancies, rather than engaging in heavy confrontation.

Key concepts in motivational interviewing include:

- Ambivalence
- Resistance
- Empathic listening

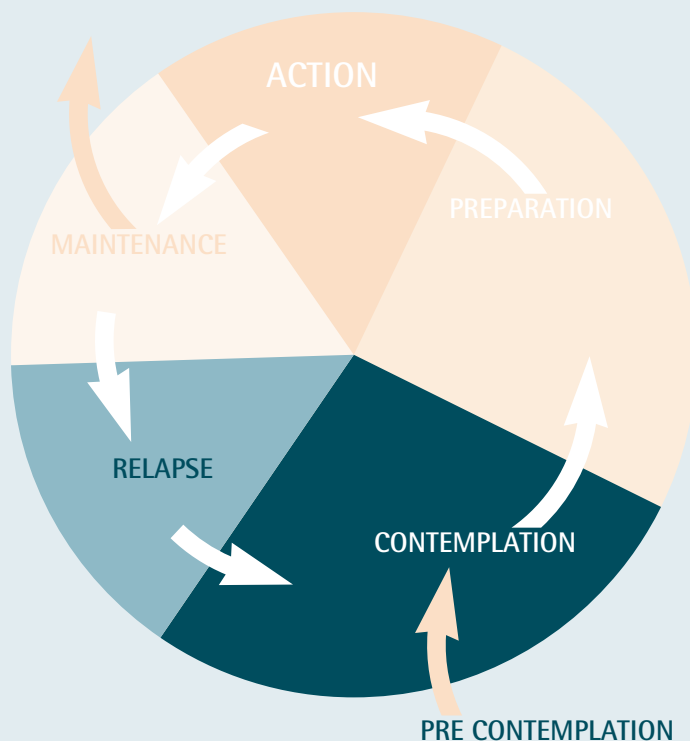
Ambivalence

A key aim of motivational interviewing is to encourage and assist the consideration of "pros and cons", which may lead the individual to move forward through the stages of change. For example, the doctor may discuss the perceived positive effects of alcohol (or cannabis or other drugs) from the patient's point of view and look for reasons why they persist with the behaviour despite negative consequences. As the patient reflects on the costs and benefits of their behaviour, the task of the health professional is to tip the balance in favour of a change.

Table 5: Prochaska and DiClemente's model of change

Client stage		Practitioner's motivational task
Pre-Contemplation	The individual does not perceive a need to change. e.g., <i>I do not want or need to cut down my drinking.</i>	Raise doubts- increase the client's perception of risks and problems with current behaviour.
Contemplation	The individual is aware of the pros and cons of drinking or drug use, but is ambivalent about changing.	Tip the balance- evoke reasons to change. Elicit risks of not changing. Strengthen the client's self efficacy for change.
Preparation	The individual has decided to change their behaviour and is in the process of mental preparation and planning how the change should be accomplished.	Help the client determine the best course of action to take in seeking change.
Action	The individual actively commits to a specific behaviour change, such as cutting down or stopping drinking.	Help the client take steps towards change.
Maintenance	Having successfully changed their behaviour, the individual is 'in recovery'.	Help the client identify and use strategies to prevent relapse.
Relapse	The individual resumes substance use, or increases use to previous levels.	Help the client to renew the processes of contemplation, preparation and action without becoming stuck or demoralised because of relapse.

Figure 3: Assessment of motivation for change.
(Prochaska and DiClemente's cycle)



- **Strategies for considering ambivalence**

Exploring 'good things' and 'less good things' about substance use acknowledges that there are perceived benefits to the patient from their substance use.

Ask: *what are some of the good things about alcohol/cannabis use?* Acknowledge each of these positive aspects and summarise them.

Ask: *what are some of the less good things about alcohol/cannabis use?*

It may be that not all the 'less good things' a person lists will be of concern to them, e.g. 'it causes arguments at home' may be seen as problematic, while 'it's bad for the liver' might be of little concern. Exploring concerns is important to identify which issues the person sees as relevant to them and so will best motivate them to change.

Prompt: the person to find out the degree to which each of the 'less good things' is a concern for them, e.g. *ask is that a problem for you?; how do you feel about that?*

Summarise: only those 'less good things' that are of concern. The aim is to encourage the person to feel that the benefits of their substance use are outweighed by the drawbacks.

- **Life satisfaction:**

The aim of this strategy is to link a patient's personal goals with the effects of substance use. It is useful for people who already have some concerns about their substance use.

- **Looking back:**

Ask: *when you were [an earlier age] what did you think you would be doing now?* In exploring any differences between earlier expectations and the present situation, the aim is to encourage links between substance use and past unfulfilled goals.

- **Looking forward:**

Ask: *how would you like things to be different in the future?* Again the aim is to produce expressions of concern about substance use.

Summarise: the person's past and current aspirations and emphasise any influence of substance use in relation to them.

Resistance

Practitioners' style powerfully determines the extent to which clients show resistance. One of the key assumptions of motivational interviewing is that *client resistance is the practitioner's problem*. It is helpful to view signs of resistance as an indicator of a mismatch between the practitioner's strategies and the client's readiness to change. Outlined below are three

different ways of responding to patient resistance. This is not an exhaustive list and the reader is referred to Miller and Rollnick (1991) for further examples.

Strategies for Handling Resistance

Patient: *I enjoy drinking and I don't want or need to change*

Three ways of responding are outlined below:

- **Simple Reflection:** Responding to resistance with non-resistance for example:

Practitioner: *You can't see any reason for changing*

- **Amplified Reflection:** Responding to resistance with an amplified or exaggerated statement to elicit the other side of the individual's ambivalence.

Practitioner: *In fact it might be hard for you to change*

- **Double-sided reflection:** Respond by acknowledging what the individual has said and also add the other side of their ambivalence.

Practitioner: *You enjoy drinking yet you acknowledge that sometimes you have trouble with drinking too much.*

Empathic listening

Creating the Right Atmosphere

The way in which a practitioner interacts with patients can be as important, or more important than the school of thought from which he or she operates (Miller and Rollnick, 1991).

Critical practitioner characteristics that promote change

- **Accurate empathy** should not be confused with sympathy. It involves accurate listening that clarifies the patient's experience, feelings and interpretations. Expressing empathy in this way is interpreted by patients as 'acceptance' and facilitates change.
- **Nonpossessive warmth** that avoids judging, criticising and confrontational approaches. Creating a climate of positive regard promotes honest self-evaluation.
- **Genuineness** and authenticity

In summary there are five general principles of motivational interviewing (Miller and Rollnick, 1991):

- **Express empathy** by accurate listening that clarifies the patient's experience, feelings and interpretations
- **Amplify discrepancy** between current behaviour and broader goal by weighing pros and cons

- Arguments are counterproductive and breed resistance
- When faced with resistance, review patients' readiness to change
- Support belief in the possibility of change. The patient is responsible for choosing and carrying out change.

Concerned confrontation

With patients who have severe problems or dependency issues and remain in the pre-contemplative stage, the concerned confrontation approach can prove useful (O'Hagan et al, 1993). Emphasis is placed on the relationship between dangers to health, quality of relationships (family, friends), work problems and the risk of early death associated with alcohol.

Involvement of family/significant others

Concerns of significant others can be a motivating factor in heavy drinkers seeking treatment (Cunningham et al, 1995). Enlisting the co-operation of significant others may encourage the patient to undertake and remain in treatment.

The role of education in brief intervention

The following information will be important to convey to patients:

- the physical consequences of alcohol and drug use
- the psychological consequences of alcohol and drug use
- treatment is effective and there are options available
- abstinence is not the only goal for all people

NB: There is little evidence that education alone has any effect on reducing alcohol-related problems (Mattick and Jarvis, 1994).

Pharmacological treatment

Pharmaceuticals are used as part of the treatment of withdrawal (detoxification) and to assist in preventing relapse.

Naltrexone has been shown in recent studies to decrease alcohol consumption and relapse in alcohol-dependent men (Volpicelli et al, 1992, 1995, 1997; O'Malley et al, 1992, 1996). It is not currently available in New Zealand but reported treatment effects suggest it could have a significant positive impact on relapse rates among dependent drinkers.

Alcohol detoxification

Alcohol-dependent patients wishing to cease drinking should be referred to specialist services for detoxification

Detoxification is the managed withdrawal from excessive consumption of alcohol. It is the first step in the treatment of alcohol dependence where abstinence is the goal. It is often a necessary step in determining the degree to which any substance use contributes to the nature and severity of another mental disorder (e.g. depressive or anxiety disorder). Detoxification is normally carried out in specialist services equipped to manage this process. Where the patient is unable to attend such services, home detoxification may be considered, and specialist advice should be sought for assistance in managing withdrawal in these circumstances.

Disulfiram (Antabuse)

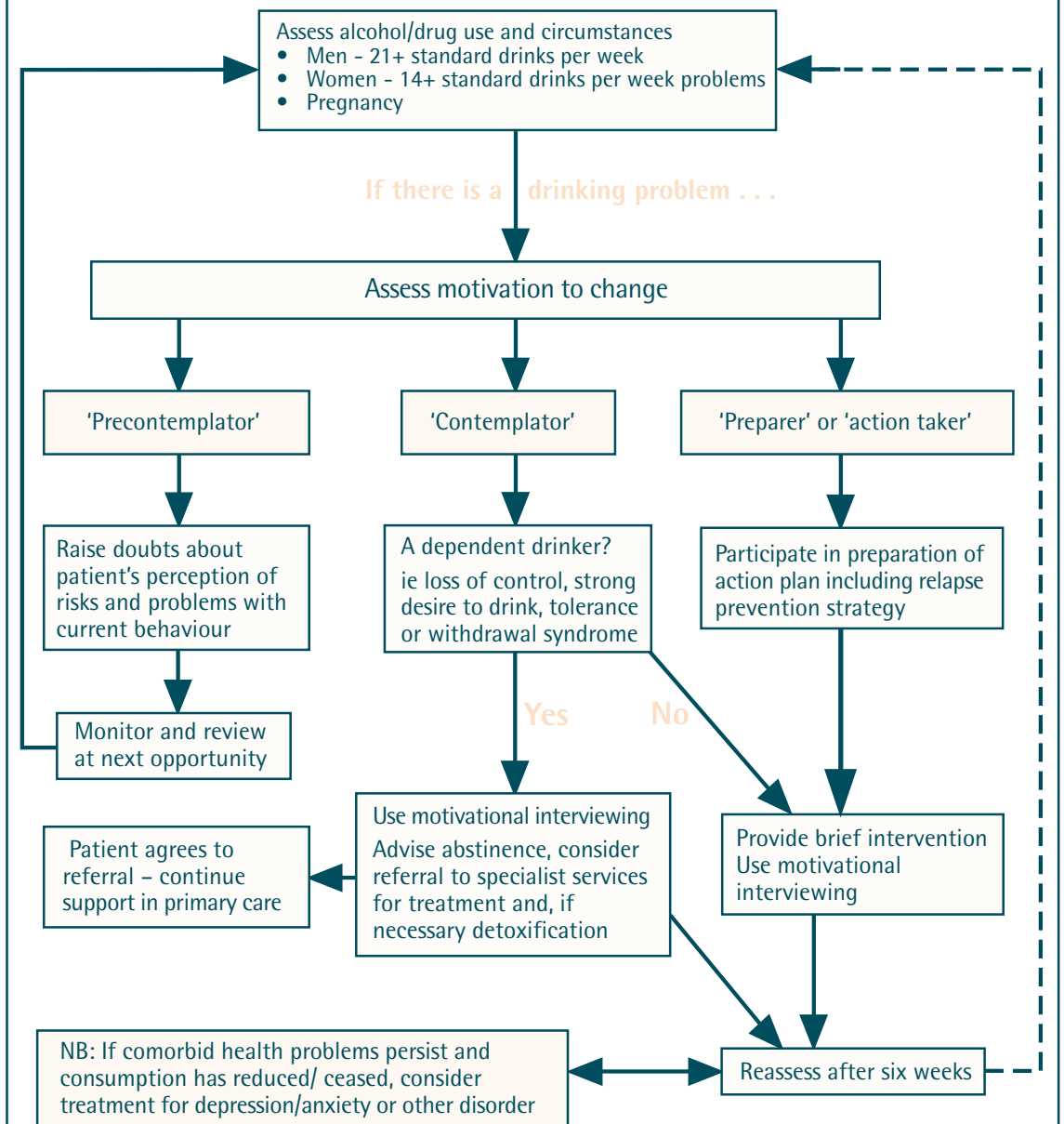
Disulfiram produces unpleasant effects such as nausea, vomiting, facial flushing, and headache on drinking alcohol. Although it does not increase the rate of abstinence when compared with a placebo, disulfiram is more effective than placebo in reducing the average alcohol intake (Chick et al., 1992; Johnsen and Morland, 1991; Fuller et al., 1986). This effect has been noted even when the disulfiram dosage is below therapeutic level (1mg compared to 250mg/day), suggesting that even the belief that they are taking disulfiram is enough to treat some individuals (Johnsen and Morland, 1991).

The beneficial effects of disulfiram are enhanced when it is used as an adjunct to psychological therapy. Care is required in its use. Disulfiram may exacerbate psychotic symptoms in patients with schizophrenia. Other reported, though rare, adverse effects include optic neuritis, peripheral neuropathy, and cholestatic hepatitis. Patients should be examined at least every four months while taking disulfiram (CSAT, 1997). No other drugs (e.g. hemineurin) have any part to play in assisting preventing relapse.

Use disulfiram for selected severely dependent patients who are:

- willing to use it,
- motivated to abstain,
- have a significant other (or social support) to ensure medication compliance,
- have ongoing psychological treatment
- have a relapse prevention plan in place.

Figure 4: Recognition, Assessment and Initial Treatment of Substance Use



Five general principles of motivational interviewing

- Express empathy by accurate listening that clarifies the patient's experience, feelings and interpretations
- Amplify discrepancy between current behaviour and broader goal by weighing pros and cons
- Arguments are counterproductive and breed resistance
- When faced with resistance, review patients' readiness to change
- Support belief in the possibility of change. The patient is responsible for choosing and carrying out change.

Treatment issues

Women

Women in treatment for alcohol disorders have higher rates of co-morbid depressive and anxiety disorders than men. Many women seeking treatment for substance abuse problems have histories of physical and/or sexual abuse which may affect treatment planning, participation and outcome (CSAT,1997). Referral to specialist treatment programmes that focus on women's issues, have a high ratio of female staff, and same-sex groups may improve treatment outcomes (APA,1995).

Cultural issues in treatment

The more the health professional is able to appreciate the cultural background of the individual to whom they are offering assistance, the better the therapeutic relationship will be. The influence of cultural factors must always be considered and discussed with the patient. The primary care health professional may need to contact the person's family/whanau, appropriate community resources, church, or alternative health providers to gain an understanding of the

person's difficulties. Issues of confidentiality and the rights of the individual need to be carefully considered. There may be conflict between the presumed right of the family to know about their family member, to contribute to decision making and be involved in the treatment on the one hand, and the wishes of the person on the other. Cultural experts can be valuable in advising on these matters and resolving conflict.

We recommend that where there is a significant difference between the cultural views held by the person and the health professional, the health professional should seek assistance from a culturally appropriate service or specialist. This is clearly the case where the person's primary culture and language is not the health professional's. It should also include situations where the person's religious beliefs and values differ significantly. The health professional should take the initiative in offering referral. Most people are likely to be referred back to primary care for ongoing monitoring and treatment. Wherever possible, joint responsibility for treatment, preferably with clear understanding of roles and responsibilities, should be arranged.

Conclusion

This guideline emphasises the importance of early identification and treatment of alcohol disorders in primary care. It has discussed the prevalence and negative effects of both alcohol and cannabis. We have relied primarily on evidence from studies conducted with individuals with alcohol-related disorders. However, there is consensus among health professionals that the same principles of assessment and treatment by brief interventions can be applied effectively to all substance use disorders.

Brief intervention in primary care is dependent on having a formal screening programme, as the majority of substance abusers will be missed unless they show obvious signs of dependency.

The most acceptable method of screening is to embed alcohol and cannabis use questions within a general health and lifestyle review. Upon recognising substance misuse, the practitioner should attempt, through successive brief interventions, to effect positive change in their patients' behaviour. This may take time as the patient passes in and out of the different stages of behaviour change.

This guideline offers workable tools for effecting change in a primary care environment. The National Health Committee hopes that it is taken up by the primary care community and used to reduce the level of consumption among problem drinkers and cannabis users.

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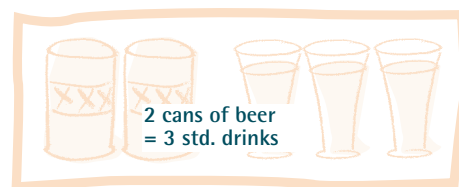
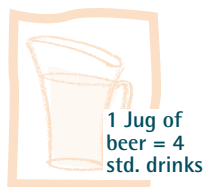
Appendix One (opposite) -

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THE AUDIT Alcohol Use Disorders Identification Test (AUDIT)

One Standard Drink is



Please tick the box next to your answer

- How often do you have a drink containing alcohol?
 Never Monthly or less Two to four times a month Two to three times a week Four or more times per week
- How many drinks containing alcohol do you have on a typical day when you are drinking? (code number of standard drinks)
 One to two 3 or 4 5 or 6 7 to 9 10 or more
- How often do you have six or more drinks on one occasion?
 Never Less than monthly Monthly Weekly Daily or almost daily
- How often during the last year have you found that you were not able to stop drinking once you had started?
 Never Less than monthly Monthly Weekly Daily or almost daily
- How often during the last year have you failed to do what was normally expected from you because of drinking?
 Never Less than monthly Monthly Weekly Daily or almost daily
- How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?
 Never Less than monthly Monthly Weekly Daily or almost daily
- How often during the last year have you had a feeling of guilt or remorse after drinking?
 Never Less than monthly Monthly Weekly Daily or almost daily
- How often during the last year have you been unable to remember what happened the night before because you had been drinking?
 Never Less than monthly Monthly Weekly Daily or almost daily
- Have you or someone else been injured as a result of your drinking?
 No Yes, but not in the last year Yes, during the last year
- Has a relative, friend or doctor, or other health worker been concerned about your drinking or suggested that you should cut down?
 No Yes, but not in the last year Yes, during the last year

Scoring the AUDIT test

Each item is scored between 1 and 4. Add to obtain the total AUDIT score. A score of 8 or more for the whole questionnaire suggests your patient has a harmful pattern of drinking. Additional information can be obtained by looking at the answers to each question.

Section A: (questions 1,2,3) enquires about 'at risk' alcohol consumption. A score of 4 (or more) for women, or 5 (or more) for men suggests a level of drinking that places the person at risk of harm.

Section B: (questions 4,5,6) enquires about symptoms of dependence. A score of 4 (or more) indicates that person may be psychologically or physically dependent on alcohol.

Section C: (questions 7,8,9,10) enquires about problems relating to drinking. A score of 4 (or more) indicates significant problems already.

Appendix Two - Questions on cannabis that may be useful in discussion with appropriate patients

To be administered following an assessment of the individuals historical and present day cannabis use

1. Have people close to you complained about your cannabis use?
2. Do you have problems with short term memory?
3. Have you experienced 'paranoid' episodes following cannabis use?
4. Do you find it difficult to get through a day without a 'joint'?
5. Do you lack the energy to get things done in the way you used to?
6. Do you ever worry about the effects of your cannabis use?
7. Do you have more difficulty in understanding new information? (difficulty in studying)
8. Have you ever unsuccessfully attempted to cut down or stop your cannabis use?
9. Do you like to get 'stoned' in the morning?
10. Are you spending more and more time 'stoned'?
11. Do you experience cravings, headaches, irritability or difficulty in concentration when you cut down or cease cannabis use?

An answer YES to three or more questions suggests problematic cannabis use.

These are used as a tool in the assessment of clients who have a cannabis use problem.

(ALAC, 1996)

Appendix Three - Readiness to Change Questionnaire

Please read the sentence below carefully. For each one please tick the answer that best describes how you feel. Your answers will be private and confidential.

	Strongly	Disagree	Unsure	Agree	Strongly
	disagree	disagree			agree
1 My drinking is okay as it is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 I am trying to drink less than I used to	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 I enjoy my drinking but sometimes I drink too much	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 I should cut down on my drinking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 It's a waste of time thinking about my drinking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 I have just recently changed my drinking habits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Anyone can talk about wanting to do something about drinking, but I am actually doing something about it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 I am at the stage where I should think about drinking less alcohol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 My drinking is a problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 It's alright for me to keep drinking as I do now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 I am actually changing my drinking habits right now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 My life would still be the same, even if I drank less	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scoring the readiness to change questionnaire.

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

<input type="text" value="- 2"/>	Strongly disagree
<input type="text" value="- 1"/>	Disagree
<input type="text" value="0"/>	Unsure
<input type="text" value="+1"/>	Agree
<input type="text" value="+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 0 to +8. A negative score reflects an overall disagreement with items measuring the stage of change, whereas a positive score represents overall agreement. The highest score represents the State of Change Designation.

Note: If two scale scores are equal, then the scale further 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, 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 prorated (ie 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

Precontemplation score

Contemplation score

Action score

Readiness to Change

Precontemplation (reverse score)

Contemplation (same score)

Action (same score)

Stage of Change designation

(Precontemplation, Contemplation or Action)

Appendix Four – Evidence for the effectiveness of brief intervention in primary care

We reviewed the randomised controlled trials that have tested the efficacy of brief intervention in reducing alcohol consumption in heavy drinkers, and conducted a meta-analysis on 9 controlled clinical trials that met our inclusion criteria. We required the studies to have used random sampling, random assignment, to have used a recognisable form of brief intervention, and to have reported results in a manner which allowed us to include their results in the meta-analysis. We excluded studies with non-random sampling and assignment, use of treatments other than or in addition to brief intervention, where there was inadequate reporting of results or inappropriate statistical analyses.

We identified 9 randomised controlled trials that tested the efficacy of brief intervention in reducing alcohol consumption in adult heavy drinkers

(WHO (1996), Wallace et al (1998), Anderson & Scott (1992), Scott & Anderson (1991), Babor & Grant (1992), Heather et al (1987), Antti-Poika et al (1988), Chick et al (1985), Richmond et al (1995).

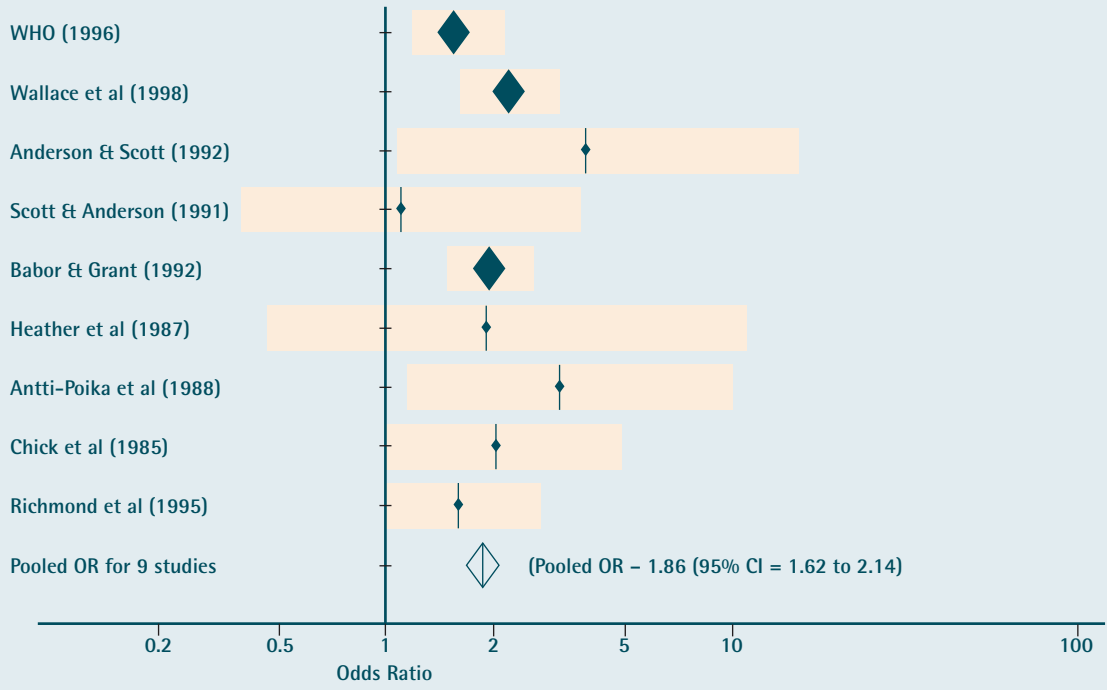
Heavy drinkers were generally defined as individuals who consumed more than 20 to 35 drinks per week, but did not include individuals with severe alcohol dependence. Brief interventions typically involved up to four 10-15 minute sessions and involved motivational counselling and education. Seven of these trials involved outpatient or primary care samples and follow-up periods ranged from 6 to 12 months. We calculated individual odds ratios for the 9

studies and combined them using a Mantel-Haenszel pooled odds ratio meta-analysis. The pooled odds ratio for the 9 studies was 1.86 (95% confidence interval 1.62 to 2.14).

Figure 1 provides a graphical description of the results of the meta-analysis. The pooled and individual odds ratios are indicated by the thin vertical lines. Confidence intervals are indicated by the rectangles surrounding each line. Sample size for each study is indicated by the relative size of each diamond. The results suggest heavy drinkers who receive brief intervention are almost twice as likely to reduce their alcohol consumption compared to heavy drinkers who receive no intervention. This result compares well with an earlier meta-analysis, (Wilk et al, 1997) which reported an odds ratio of 1.91 (95% CI 1.61 to 2.27) for brief intervention relative to no intervention in reducing alcohol consumption.

We calculated a pooled 'Numbers Needed To Treat' (NNT) estimate of the efficacy of brief intervention in reducing alcohol consumption in heavy drinkers using results from the 9 trials described above. NNT is an index of treatment efficacy expressed in terms of the number of patients that must be treated by a given intervention before one will improve. The pooled NNT was 7 (95% CI 6 to 9) suggesting 7 heavy drinkers must be treated with a brief intervention before 1 heavy drinker will reduce their alcohol consumption.

Figure 5. Odds Ratio Plot



Membership of the working party

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Nelson

Ron Butler
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Lyttleton

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