Part 1

Overview and Introduction

Overview and Introduction

PROBLEMS caused by the use of psychoactive drugs touch all areas of medicine and health care. Some problems are well known and highly visible such as the respiratory illnesses caused by smoking, liver disease from harmful alcohol consumption and overdose from heroin injection. Others are more subtle and often missed by health professionals as an underlying cause of a wide range of health and social harms.

Personal and social problems from drug use are substantial and cut across all domains of functioning including personal relationships, family life, employment and psychological health.

The health and economic costs associated with the use of drugs are high, with costs of legal drugs estimated to be substantially higher than those from illegal drugs. The annual cost of drug use in Australia is estimated to be $34.4 billion (Collins & Lapsley, 2002) of which:

- $21.1 billion was from tobacco
- $7.6 billion from alcohol
- $6.1 billion from illicit drugs

The Australian Institute of Health and Welfare estimated that in 1998 there were 23,313 drug-related deaths in Australia of which 19,019 were due to smoking tobacco, 3,271 to risky alcohol use and 1,023 to illicit drug use (Ridolfo & Stevenson, 2001). The bulk of the latter comprised deaths from heroin overdose.

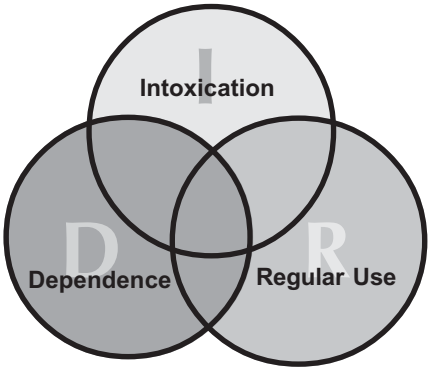
In addition to drug-related deaths, in 1997–1998 there were:

- 142,525 hospital separations attributable to tobacco smoking
- 71,422 attributable to risky alcohol use
- 14,471 to illicit drugs

There are three main patterns of risky drug use with corresponding patterns of problems. These are:

- intoxication (e.g. violence, falls, road trauma, overdose)
- regular use (e.g. liver disease, cancer)
- dependence (e.g. withdrawal symptoms, social problems)

These three distinct patterns of use can occur within the one person, or in different individuals.



There are also growing problems associated with injecting drug use including the spread of blood borne viruses. While the rate of HIV infection amongst Australian injecting drug users is still very low by world standards (1–2%), hepatitis C is an emerging concern and is likely to generate some thousands of cases of liver disease in future years (NCHECR, 1999).

TYPES OF DRUGS AND THEIR EFFECTS

Identifying Harms

Alcohol- and drug-related harms are not specific to the effects of the drug. Harms result from the interaction between:

The drug

- patterns of use (how much, when used, how often)
- and other drugs used

The individual

- age, weight, gender and general health
- tolerance and previous experience of the substance including intoxication, after effects and withdrawal
- expectations of use and effects
- current mood and psychological health

The environment

Factors that influence the drug's effects and patterns of use such as:

- social settings and company
- context of use
- patterns of drug use according to ritual or culture

DRUG USAGE

Knowledge and understanding about patterns and correlates of drug use are derived from various sources including surveys. Surveys of drug use are usually (1) conservative estimates of prevalence and (2) do not give an indication of the number of people using drugs in *problematic* ways. In the clinical setting careful, individualised assessment is required to determine patterns and levels of use. The following provides brief highlights of key drug use patterns (see relevant chapters for more detail on specific drugs).

Alcohol

See Chapter 3
Alcohol

Most Australians drink alcohol – 80% of Australians aged 15 and over report drinking alcohol in the past year. The National Health and Medical Research Council's (NHMRC) new Alcohol Guidelines (NHMRC, 2001) define low risk regular use as no more than 4 standard drinks per day for men and 2 for women, and no more than 6 and 4 drinks for males and females respectively on occasion.

www.nhmrc.gov.au/
publications/pdf/ds9.pdf

A higher level of intake is now considered to be low risk on an occasional basis, ie no more than 6 standard drinks for men and 4 for women, provided certain precautions and restrictions are observed (e.g. drinking less if at all, when pregnant, not drinking before driving). However, there are many drinkers who exceed these limits and 46% of males and 32% of females do so at least once a month (Heale et al., 2000). Heavier patterns of consumption are a concern for all health professionals as they are strongly associated with a wide range of acute and chronic harms.

Tobacco

See Chapter 4
Tobacco

The 2001 National Drug Strategy Household Survey found that 21% of males and 18% of females smoked daily (AIHW, 2002).

Tobacco use amongst Indigenous Australians is 2 to 3 times higher than the broader community.

Very few people smoke only occasionally and there is no established safe level of tobacco use. Early uptake of tobacco smoking by young people is of concern for several reasons including its highly addictive nature.

Other Drugs

See Chapters 5–12

Cannabis is the most widely used illicit drug in Australia with 13% of all individuals aged 14 or over having used it during the previous 12 months (AIHW, 2002) and 33% at some time in their lives.

Amphetamine and ecstasy use has become increasingly prevalent: one in nine males aged 20–29 years reported using amphetamines in the last 12 months. Males are generally more likely to use, with the exception of teenagers where use by girls is more prevalent than by boys (AIHW, 2002).

Lifetime use of heroin is estimated to be 2% and of cocaine 3–4% of the population. It is estimated that in the year 2000 there were approximately 74,000 dependent heroin users or 0.7% of Australians aged 15 to 54 years of age (Hall et al., 2000).

Polydrug Use

Until recently it was common to characterise illicit drug use by the drug, or class of drug, primarily used. For instance, heroin users were identified as a distinct category of user, as were stimulant users. These characterisations are no longer valid. Most illicit drug users are likely to use a variety of substances. Drug substitution also occurs. When there is a shortage of some drugs (e.g. heroin) other drugs (e.g. amphetamines, alcohol) may be used as an alternative. Increased ease of availability of drugs is likely to have contributed to diversity in patterns of use.

Certain associations are well recognised; for example:

- cigarettes and alcohol often go hand in hand, particularly where heavy use of either substance is involved
- cannabis smokers are almost invariably tobacco smokers (although obviously the reverse is not the case)
- heroin users often also take drugs such as cocaine and benzodiazepines, and nearly all heroin users are also cigarette smokers
- heavy drinkers also often use illicit drugs

Many illicit drug users possess sophisticated pharmacological knowledge. Users often exhibit considerable skill in the titration of various substances when used in concert with one another. For example, combinations of drugs such as heroin and cocaine (known as 'speedballs' *) allow the sedative action of one drug (i.e. the heroin) to take the sharp edge off the stimulant (i.e. the cocaine). Similarly, some substances are less commonly taken when using another preferred drug e.g. some users avoid taking ecstasy and alcohol concurrently.

Multiple substance use complicates the assessment process. Signs and symptoms of intoxication for various drugs can be similar. Also concurrent use can complicate withdrawal. Polydrug use also confounds our understanding of dependence problems (Gossop, 2001). A person who uses a range of different psychoactive substances may not be dependent on all drugs that he/she uses. Comprehensive drug use histories are required, and no assumptions should be made about patterns of use or non-use. It is important to note that most available assessment tools assess dependence (and not usually *problematic use*) and for a single drug only, or provide separate substance specific measures. Careful decisions regarding prioritisation for treatment are needed. This should be done in consultation with the client/patient.

* Note that the term 'speedball' sometimes also refers to a combination of heroin and amphetamine.

Routes of Administration

Drugs can be taken in various ways. The mode of administration is a significant mediating factor on the effect of a drug. Various routes of administration are preferred because they can enhance or facilitate drug effects. Different modes of administration have advantages and disadvantages. The most common routes of administration are:

- *oral ingestion:* probably the oldest and the most common form of taking drugs. Advantages are convenience, no special paraphernalia is required and degree of safety for some drugs. Disadvantages are the slow absorption of some substances
- *chewing:* used for coca leaf, tobacco, betel-nut and tea. Absorption occurs across the oral mucosa
- *nasal insufflation:* includes snuffing, nasal inhalation or snorting. Absorption is through the nasal mucosa. Snuffing can be used for cocaine, powdered opium, heroin and tobacco. Sniffing of amyl nitrite occurs, as does sniffing of petrol and other volatile substances
- *smoking:* is used for a wide variety of substances including tobacco, cannabis, opium, heroin, cocaine, amphetamines and phencyclidine (PCP)
- *rectal administration:* commonly used in medical treatment, it is also a method sometimes used by drug users. Disadvantages are the potential for irregular, unpredictable and incomplete absorption
- *parenterally (via injection):* became possible in the late 19th century with the development of the hypodermic needle. Arguably this has irrevocably transformed hedonistic drug use. Administration can be intravenous (via a vein), intramuscu-

lar (via a muscle), or subcutaneous (under the skin). Each has advantages and disadvantages. Injection carries with it a range of important health risks including transmission of viral and bacterial diseases and tissue damage

Harm minimisation strategies provide opportunities to educate users about safer ways to administer drugs. Safe injecting techniques are especially important. Changing from one route of administration to another may also be a useful stepping stone to cutting down and quitting.

Table 1–1 lists the major psychoactive drugs and describes their intoxication effects and potential adverse health effects.

For more information regarding specific effects of particular drugs, including a discussion of acute effects, high dose effects and effects of chronic use, refer to the individual chapters in Part 2 of this Handbook.


See Chapters 3–12

The website of the National Institute of Drug Abuse (NIDA) located in the United States of America contains additional useful information about common names of drugs, routes of administration and references for further reading.


www.nida.nih.gov

Terminology

Throughout this Handbook, you will note some variations in the language used to describe drug and alcohol use and associated problems. In Australia, the preferred terminology is 'problematic use' as this is less pejorative than other terms. However, some of the international and official classifications include terms such as 'abuse' or 'misuse'. The preference is to avoid the use of negative or value-laden terms, labels or language.

As this Handbook is intended for a wide range of health and human services workers terms such as 'patient' and 'client' are used interchangeably.

DEFINITIONS OF DRUG AND ALCOHOL PROBLEMS

Problematic drug use has been formally categorised in some systems as:

- hazardous use
- harmful use
- substance abuse
- substance dependence

Hazardous Use

Hazardous use refers to a pattern of substance use that increases the risk of harmful consequences for the user. These consequences can include physical and/or mental health problems; some would also include social consequences. Hazardous use refers to patterns of use that are of public health significance despite the absence of any current disorder in the individual user.

Refer to National Institute on Alcohol Abuse and Alcoholism (NIAAA) Thesaurus on their website.


www.etoh.niaaa.nih.gov/
AODVol1/Aodthome.htm

Harmful Use

Harmful use (ICD–10) is defined as a pattern of psychoactive substance use that is causing damage to health. The damage may be physical (e.g. hepatitis following injection of drugs) or mental (e.g. depressive episodes

Table 1–1
Intoxication and potential adverse health effects

	Intoxication effects	Potential adverse health effects
Alcohol	• reduced pain and anxiety • feeling of wellbeing • lowered inhibitions	• trauma and a range of effects on cardiovascular, respiratory, gastrointestinal, haematological and neurological systems • dependence
Opioids • heroin • codeine • fentanyl • morphine • methadone • buprenorphine • pethidine	• pain relief • euphoria • drowsiness	• respiratory depression and arrest • nausea • confusion • constipation • sedation • unconsciousness • coma • tolerance • dependence
Stimulants • amphetamines • cocaine • ecstasy/MDMA • methyulphenidate • nicotine • caffeine	• increased heart rate, blood pressure, metabolism • feelings of exhileration, energy, increased mental alertness	• rapid or irregular heartbeat • reduced appetite • weight loss • heart failure • dependence
Depressants • barbiturates • benzodiazepines	• reduced pain and anxiety • feelings of wellbeing • lowered inhibitions • slowed pulse and breathing • lowered blood pressure • poor concentration	• confusion • fatigue • impaired coordination, memory, judgement • respiratory depression and arrest • dependence
Cannabinoids • cannabis • hash	• euphoria • slowed thinking and reaction time • confusion • impaired balance and coordination	• cough • frequent respiratory infections • impaired memory and learning • increased heart rate • anxiety • panic attacks • tolerance • dependence
Other – includes: • hallucinogens such as LSD; dissociative anaesthetics (ketamine, PCP); inhalants (solvents, nitrites and other gases); steroids	• various effects	• various effects

Source: adapted from the US National Institute of Drug Abuse (NIDA) website. Information about alcohol has been added.

Table 1–2
DSM–IV–TR (APA, 2000) Criteria for substance dependence

The maladaptive pattern of substance 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 need for markedly increased amounts of the substance to achieve intoxication or desired effect or a markedly diminished effect with continued use of the same amount of the substance
2. Withdrawal, as defined by either the characteristic withdrawal syndrome for the substance or where the same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms
3. The substance is often taken in larger amounts or over a longer period than was intended
4. There is a persistent desire or unsuccessful attempts to cut down or control substance use
5. A great deal of time is spent on activities necessary to obtain the substance or to recover from its effects
6. Social, occupational or recreational activities are given up or reduced
7. Substance use is continued despite awareness of recurrent problems associated with use

secondary to heavy alcohol intake). Harmful use commonly, but not invariably, has adverse social consequences. Social consequences, however, in themselves, are not sufficient to justify a diagnosis of harmful use.

Substance 'Abuse'

Substance 'abuse' is a term used by DSM–IV–TR (APA, 2000, p. 199). It is defined as a 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:

- failure to fulfil major role obligations
- use in situations in which it is physically hazardous
- recurrent substance-related legal problems
- continued use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance

Unlike dependence, 'abuse' is not characterised by withdrawal, tolerance or a pattern of compulsive use, only the adverse consequences of repeated use.

Substance Dependence

Substance dependence on the other hand, is defined (APA, 2000) as a characteristic set of cognitive, behavioural and physiological signs in which the individual will continue to use the substance despite considerable related problems. Tolerance has developed and withdrawal symptoms are present upon cessation of the drug. The actual criteria for dependence are

summarised in Table 1–2 DSM–IV–TR (2000) Criteria for Substance Dependence.

In addition to these criteria, the World Health Organization (WHO) International Classification of Diseases, 10th Edition (ICD–10) suggests that another essential characteristic of dependence is that the individual must possess a strong desire to take the substance and is indeed consuming it (Proudfoot & Teesson, 2000).

It is important to note that many problems associated with the use of alcohol or other psychoactive drugs do not involve dependence. That is, you do not need to be dependent on a drug to experience harms from its use.

STANDARDS OF CARE

Attitudes Towards Drug Users

Psychoactive drug users often experience discrimination and stigma when accessing health services. While not all health professionals discriminate against drug users, poor treatment and discriminatory practices have been identified as primary barriers to accessing health care.

Negative attitudes are often based on stereotypes and fears. Such stereotypes can result in discrimination, stigma and marginalisation. Like other groups in the community, drug users are a diverse group with differing needs and backgrounds. In the health care context, recognising the diverse needs of every individual is critical to professional and effective treatment and ensures appropriate standards of care are met.

Drug Users' Rights

Treating all illicit drug users as 'drug seeking', unreliable and disruptive will not result in a positive outcome for either the person who uses drugs or the health professional. Participation in an illegal behaviour does not mean that individuals surrender their basic health and human rights. Illicit drug users should be treated in the same way as other people, that is, as individuals with specific needs requiring information and communication on all options, professional diagnosis and where appropriate, treatment.

ROLE OF HEALTH AND HUMAN SERVICES PROVIDERS

Medical Practitioners and Nurses

Medical practitioners and nurses who are not specialists in drug and alcohol have a critically important role to play in the provision of drug and alcohol treatments.

General practitioners and other primary care health professionals are particularly well suited for this role because:

- 85% of the population visit a general practitioner at least once per year
- general practitioners and primary health professionals are usually the first point of contact with the health care system
- patients are often at a learning moment and expect to receive lifestyle advice from general practitioners
- general practitioners are in an ideal position to link prevention with comprehensive, continuing and holistic care
- general practitioners provide a range of services that span the health care continuum from prevention of illness to treatment and rehabilitation

(RACGP National Preventive & Community Medicine Committee, 1998)

Medical practitioners and nurses are ideally placed to:

- provide relevant information about drugs and alcohol to all patients
- identify drug- and alcohol-related problems
- provide interventions
- refer for specialist assessment and treatment when required; and
- coordinate care and follow up patients over time

There is a growing body of evidence about the effectiveness of interventions and benefits of treatment that medical practitioners and nurses can provide. These include:

- screening
- assessment
- information and advice
- brief interventions for tobacco, alcohol and to a lesser extent cannabis
- detoxification, including home detoxification
- pharmacotherapy for tobacco, alcohol and opioid dependence
- counselling, including motivational interviewing, and relapse prevention
- referral to clinicians with specialist skills in drug and alcohol
- follow-up monitoring and care coordination

These interventions have been shown to be effective in specialist and non-specialist settings.

For clinicians with specific drug and alcohol competencies, a more comprehensive role in the care of patients can be undertaken including:

- management of intoxication and withdrawal
- motivational interviewing
- management of detoxification
- pharmacotherapy treatments
- counselling
- treatment of medical comorbidities
- management of psychiatric comorbidities
- care of pregnant women with drug- and alcohol-related problems and their neonates; and
- follow-up monitoring and review

Other Frontline Workers

The complexity and diversity of problems associated with alcohol and drug use has increased substantially over the past decade. The potential support and intervention roles for health and human services workers has increased accordingly. Evidence for the efficacy of early intervention has been well established and identifies an important role for any professional in a position to intervene for alcohol and drug problems.

Key professional groups identified as pivotal frontline workers include:

- alcohol and other drug specialist workers
- general health workers such as medical practitioners, nurses, Indigenous health workers and psychologists
- volunteer workers in a variety of community groups including parent and family groups, self-help groups, church groups and counselling support groups
- police and law enforcement personnel
- welfare professionals, including social workers, youth workers and other community-based workers
- teachers and education personnel

It is no longer assumed that support and intervention for alcohol and other drug (AOD) problems is the exclusive province of specialist professionals. While interventions and treatments have become more specific and technical in recent years (most notably in relation to pharmacological interventions) there is also an expanded role for generalist frontline workers especially from a prevention, harm minimisation and early intervention perspective.

Health Professionals' Role with Aboriginal and Torres Strait Islanders

There is a range of special considerations in relation to the AOD use of Indigenous Australians. Patterns and correlates of use are often quite different and health care needs more complex than for the wider community.

Proportionately fewer Indigenous people drink than in the Australian community at large. However, amongst those who consume alcohol the majority do so at hazardous and harmful levels, often drinking heavily on a single occasion. There is often intense social pressure for Indigenous drinkers to continue to drink. Relatedness to others is deeply embedded within Aboriginal social life and sharing alcohol (and increasingly other drugs) naturally plays an important part in this. Public pressure to share and socialise around alcohol is very strong, and those who try to moderate or give up may be criticised. Health care workers can be valuable aids in supporting moderate use or cessation.

Prevalence of tobacco smoking is 2 to 3 times higher than the national average, and there are very high rates of cannabis (yarndi, ganya) use. It has also been recognised recently that rates of injecting drug use amongst young Indigenous people have grown exponentially and are associated with very high levels of diseases such as hepatitis C. There are also increasing levels of use of other drugs such as heroin with high levels of needle sharing.

General practitioners and other health care workers have considerable potential to help motivate Indigenous patients to reconsider their drinking and/or drug use. Health professionals should not feel constrained (e.g. by fears of being culturally inappropriate), to provide a range of brief interventions to patients just because they are Indigenous. As is the case with any patient or client, such advice should be offered sensitively and in a non-judgmental manner, and avoid any implication of criticism. Research into self-quitting amongst Indigenous people suggests that health care workers can be more influential than they think (see Table 1–3).

The Australian Drug Information Network (ADIN) contains useful links:

www.adin.com.au/indigenous.html

Health Professionals' Role with Culturally and Linguistically Diverse (CALD) Groups

Cultural background and drug use

Australia is ethnically a highly diverse country. A person's cultural background i.e. country of birth, language spoken at home, religion and ethnic background may have an impact on drug use and/or associated problems and their resolution. Different cultures vary in their attitudes to and use of alcohol and other drugs. Alcohol consumption, for example, varies greatly within and between countries. In Italy, for instance wine is commonly consumed with meals but intoxication is not accepted. Some cultures favour the use of drugs little known in Australia (e.g. khat, betel nut), while alcohol is much less widely used in many countries, including some which are significant sources of refugees and migrants to Australia. In many Asian countries, the traditional use of opioids once tended to be by smoking. However, this is rapidly changing with injecting becoming increasingly common among Asian populations.

Religious affiliation may also be relevant. Religious observance is often an important aspect of culture, and may play a part in the manner and extent of drug use. A person of Islamic background for instance may develop a problem with alcohol, but be less willing to discuss it and may fear community criticism.

Table 1–3
Why health care workers are influential amongst Indigenous people

Reason	Explanation
Privacy of consultation	Avoids the potential stigma of attending an identified alcohol and other drug service, and provides the necessary confidentiality.
Expectations of the doctor's role	Indigenous patients expect doctors and health care workers to talk honestly about their health problems, to diagnose and give advice. It is particularly important to link the presenting problem with alcohol- or drug-related problems where possible, as patient's knowledge about these links may be minimal. It is important to stress the effect of the patient's drinking and/or drug use on their family responsibilities.
Respect for specialised knowledge	Medical practitioners in particular are known to have specialised knowledge of the body. This invests them with considerable authority amongst Indigenous people, and provides doctors with significant potential to motivate for change in drinking and other drug use behaviour.
Personalised advice and providing evidence of harm	Linking advice on alcohol consumption to the individual's presenting problem is more influential than a general talk about alcohol awareness. Indigenous patients seem to respond well to offers of biological tests, the results of which provide objective proof of the harmful effects of alcohol misuse. Such evidence can be particularly useful to the indigenous patient.
Neutral advice from an informed outsider	Professional advice on changing drinking behaviour can motivate the individual to consider change, partly because a doctor is usually an 'outsider', not of the patient's family or community. Community health workers known to the patient can sometimes find it intrusive to discuss alcohol- or drug-related matters with other indigenous people. In the face of intense social pressures to drink, authoritative advice from an outsider can be of particular value. Having an external reason can legitimise an individual's refusal to participate in drinking sessions with friends and family members, without causing offence.

The circumstances under which a person came to Australia may also be important. Those migrating under family reunion quotas may have more support than refugees who may have previously faced poverty, illness and war. Some individuals may have depression or post-traumatic stress disorder following trauma or torture in their country of origin.

Prevention and Treatment Strategies

Prevention and treatment programs need to take into account the characteristics of individuals with Indigenous and non-English speaking backgrounds. Different cultural values as well as language issues need to be considered in any prevention strategy. There is untapped potential for ethnic newspapers and broadcasting services to be used in primary prevention strategies.

Secondary Prevention

Many screening tools have not been validated with different ethnic or cultural groups and should be used and interpreted with care. The AUDIT alcohol screening tool has been validated with different cultural groups.

See Chapter 3
Alcohol
'The AUDIT', p. 45

Interpreting and Translation

The use of skilled interpreters with the appropriate dialect and of the patient/client's preferred gender is crucial. It is inappropriate to use family members as interpreters. Even if the patient does not see the need, an interpreter may still be required to ensure an accurate assessment and appropriate management strategy.

Resources

NSW Drug and Alcohol Multicultural Education Centre, DAMEC.

www.damec.org.au

OTHER SPECIAL NEEDS GROUPS

There are several other groups who have special needs in relation to AOD use. These groups may not engage well in treatment unless their special needs are met. These groups include:

- those located in rural and remote areas
- women
- those of different sexual orientations
- youth

The last group, youth, are particularly important to highlight. More young people are engaging in problematic AOD use at younger ages. They are especially vulnerable to AOD-related problems due to age and inexperience. Health and human services workers are increasingly called upon to provide youth-friendly and youth-appropriate services.

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Overview
Introduction

General Principles of Management and Intervention

THIS CHAPTER reviews key principles involved in identification, management and intervention of alcohol and other drug (AOD) problems. Issues covered here are expanded on in relevant chapters.

Problems associated with the use of alcohol or other drugs can be related to:

- intoxication
- regular use
- dependence

Not all problems are related to dependence or addiction. Many problems are related to non-dependent patterns of use that are risky for either the person or those around them. Interventions should be tailored to the type of problems experienced or the nature of the risks to which the individual is exposed.

HARM MINIMISATION

Harm minimisation is an important principle in the management and intervention of AOD problems. Many intervention options are pragmatic in nature and based on an understanding that changing behaviour can be a lengthy, complex process. From a harm minimisation perspective abstinence may not be the highest or most immediate priority: Emphasis is placed on reducing as many prob-

lems as possible associated with alcohol and drug use, and not just focusing on the drug use per se. Harm minimisation strategies address the overall health and wellbeing of the individual and the community at large.

EFFICACY OF TREATMENT

It is important to stress the efficacy of treatments specific to problematic AOD use. In contrast to common perceptions, there is a range of effective, empirically evaluated treatment options available. Treatment can be successful. It is as successful as many general medical treatments that are held in high regard.

Intervention earlier rather than later is strongly recommended. Treatment for long-term chronic problems can also be very effective.

Table 2–1
Treatment success for dependence

Drug of Dependence	Success Rate (%)
Alcohol	50 (40-70)
Opioids	60 (50-80)
Cocaine	55 (50-60)
Nicotine	30 (20-40)

Source: O'Brien and McLellan (1996)

EARLY RECOGNITION AND SCREENING

Early recognition is important as it can enable intervention to occur before dependence or irreversible damage has developed. However, alcohol and drug problems can be difficult to detect, especially in the early stages. Reasons include:

- not knowing what to look for
- lack of vigilance
- embarrassment about asking questions
- not knowing what to do if a problem is uncovered
- the person's denial or evasion

(Edwards, Marshall and Cook, 1997)

Detection rates can be improved by:

- routine enquiry about alcohol and drug use
- screening questionnaires
- biological screening (pathology tests)
- knowledge of common clinical presentations

ROUTINE ENQUIRY ABOUT ALCOHOL AND DRUG USE

General practice and primary health care offer a variety of opportunities to enquire about alcohol and drug use; for example, in the context of:

- new patients — as part of initial information gathering
- management of chronic problems — alcohol for example, is a risk factor in cardiovascular disease, diabetes, depression
- management of acute problems, especially trauma, gastrointestinal disorders, anxiety/stress, psychological problems
- preoperative assessment
- pre-conception and antenatal care
- enhanced Primary Care Medicare Benefit Schedule items — health assessment, care plans and case conferences

Screening Questionnaires

Use of general questionnaires covering lifestyle issues such as smoking, diet, exercise, alcohol and drug use may be less threaten-

ing and stigmatising for patients.

There is also a number of short, well validated questionnaires which can be used to screen for alcohol problems. Screening and brief interventions can readily be combined in a single general practice consultation.


See Chapter 13
Psychosocial Interventions

Biological Screening

A number of blood tests can be used to screen for alcohol problems. However, they can be less sensitive and specific than questionnaires. These screening tests include:

- full blood count, including MCV
- liver function tests, including gamma GT
- triglycerides

Urine testing can detect alcohol, other drugs (e.g. cocaine, opioids cannabis, benzodiazepines and barbiturates) and/or their metabolites.

Screening tests for drug use include:

- full blood count, including white cell count
- liver function tests
- hepatitis B and C and HIV serology

COMMON CLINICAL PRESENTATIONS

Indicators of alcohol- or drug-related problems are wide-ranging and can involve:

- cardiovascular
- gastrointestinal
- musculoskeletal
- neurological
- dermatological
- genito-urinary systems
- accidents/trauma, social and legal incidents

Indicators of problematic drug use can include:

- infections (injecting users)
- accidents/trauma
- psychiatric problems
- behavioural, social and legal incidents


See Chapters 3–12 for more detail about individual drugs

Assessment

Assessment is critical and has several purposes:

- to identify substance use behaviour early
- to discover the extent of use and its health effects
- to examine the social context of substance use in both the patient and significant others
- to determine a care plan and appropriate interventions

(Rassool, 1998)

The assessment phase should fulfil four important functions:

1. developing a therapeutic relationship based on trust, empathy and a non-judgmental attitude
2. helping the client to accurately reappraise their drug use, which may in turn facilitate the desire to change
3. facilitating a review of the client's past and present circumstances and linking these to current drug use
4. encouraging the client to reflect on the

choices and consequences of drug using behaviour

(Helfgott, 1997)

Traditionally treatment success was measured by abstinence. Today there is more emphasis on the client's:

- wellbeing
- beliefs about drinking and drug use
- readiness to change
- alcohol- and drug-related expectancies
- social functioning and social support

These are all important predictors of success.

Current approaches to treatment of alcohol- and drug-related problems reflect a continuum of treatment.

MANAGEMENT OF LOW LEVEL PROBLEMS

Low level drug and alcohol problems are much more common than dependence and are major causes of morbidity and mortality. Individuals with low level problems are better suited to brief and early interventions whereas individuals experiencing more severe problems need more specialised treatment (National Expert Advisory Committee on Alcohol, 2001).

A 'brief intervention' is considered to be:

> *'any intervention that involves a minimum of professional time in an attempt to change drug use… Any intervention requiring a total of between five minutes and two hours'*

(Heather, 1990)

Brief interventions are particularly suitable for primary care but can also be used in emergency departments, hospital wards or outpatient clinics and a range of non-medical settings.

They are recommended for individuals with:

- hazardous/harmful alcohol use without dependence
- a low to moderate dependence on alcohol
- a dependence on nicotine
- a low to moderate dependence on cannabis

(Best Practice in Alcohol and Other Drug Interventions Working Group, 2000).

There is compelling evidence for the effectiveness of brief interventions to reduce hazardous and harmful alcohol consumption by 30–40% (WHO Brief Intervention Study Group, 1996).

Brief interventions are not considered suitable for:

- more complex patients with additional psychological/psychiatric issues
- patients with severe dependence
- patients with poor literacy skills
- patients with difficulties related to cognitive impairment

In these instances, more in-depth intervention is recommended (Heather, 1995).

Brief intervention can take a variety of forms but often includes:

- brief assessment
- self-help materials
- information on safe levels of consumption
- advice on reducing consumption
- harm reduction
- relapse prevention
- assessment of readiness to change, in-

cluding motivational interviewing
- brief counselling, including problem solving and goal setting
- follow-up

Six therapeutic elements are common to successful brief interventions (FRAMES):

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

S. Self-efficiency — stress belief in the person's capacity for change

(Miller and Sanchez, 1993)

See Chapter 13
Psychosocial Interventions

Psychosocial Interventions

Psychological interventions are a key component of a comprehensive treatment program and can involve group therapy or individual counselling.

> *'…counselling alone is not usually sufficient to change the drug taking behaviour of most clients'*

(Jarvis et al., 1995)

Counselling is a joint approach between the counsellor and the client with treatment plans negotiated and agreed upon by both parties. No single psychological approach is superior, and the treatment program should be tailored to the individual patient/client, taking into consideration such factors as culture, age, gender and presence of comorbidity.

General counselling should include:

- linking patients with the appropriate services while the patient is still engaged
- anticipating and developing strategies with the patient to cope with difficulties before they arise
- specific evidence-based interventions where appropriate (e.g. goal setting, cognitive behavioural therapy, motivational enhancement therapy, problem solving)
- focusing on positive internal and external resources and successes as well as problems and disabilities
- consideration of the wider picture and helping the patient on a practical level (e.g. with food, finances, housing)
- where appropriate, involving key supportive others to improve the possibility of behavioural change outside the therapeutic environment

(Best Practice in Alcohol and Other Drug Interventions Working Group, 2000)

Mutual aid groups such as Alcoholics Anonymous, Narcotics Anonymous, Al-Anon (for relatives of alcohol dependent individuals) and Alateen (for adolescent relatives) are also available. Their approaches are based on the 12 Steps, a set of principles that emphasise personal responsibility and honesty.

MAINTENANCE PHARMACOTHERAPIES

A number of effective therapeutic drugs are now available for the treatment of dependence, primarily for alcohol, nicotine and opioid de-

pendence. It is likely that the use of pharmacotherapies will increase in the future.

Pharmacotherapies should not be considered as stand alone treatments but should be used as part of a comprehensive treatment program, including supportive counselling, other relevant therapies and social support.

PHARMACOTHERAPIES FOR ALCOHOL DEPENDENCE

Acamprosate (Campral®)

This is an anticraving agent which acts as a GABA-receptor agonist. Randomised controlled trials have shown:

- reduced quantity and frequency of drinking in patients who do not achieve complete abstinence
- reduced rates of relapse (where relapse is defined as consumption of any alcohol)
- increased percentages of abstinent days during treatment
- increased rates of abstinence

Naltrexone (Revia®)

This anticraving agent is a competitive opioid antagonist which blocks the euphoric and reinforcing effects of alcohol. Randomised controlled trials have shown:

- reductions in the amount and frequency of drinking overall
- reductions in the rate and relapse into heavy drinking (where relapse is defined as a return to > 5 drinks per day)
- increased rates of alcohol abstinence

Both naltrexone and acamprosate are available on the Pharmaceutical Benefits Scheme (PBS) for use within a comprehensive treatment program.

Disulfiram (Antabuse®)

An alcohol-sensitising agent which inhibits aldehyde dehydrogenase causing a toxic build-up of acetaldehyde if alcohol is consumed. This results in unpleasant symptoms such as facial flushing, nausea, vomiting, sweating and palpitations.

Randomised controlled trials have shown variable results and only a modest effect in promoting abstinence. Disulfiram is not available on the PBS.

PHARMACOTHERAPIES FOR OPIOID DEPENDENCE

Buprenorphine

A strong opioid analgesic with both partial agonist and partial antagonist properties. It is an alternative to methadone for withdrawal and maintenance treatment, and has a much lower risk of death from overdose than methadone. Buprenorphine is listed on the PBS as S100 under Section 100 of the National Health Act 1953 and is approved by the Therapeutic Goods Administration (TGA).

Methadone

This is a long-acting synthetic opioid which can be used for both withdrawal and maintenance treatment. It decreases the need for heroin-dependent individuals to regularly use intravenous opioids. Methadone maintenance programs monitor drug use and should provide ongoing counselling and support. Methadone is listed on the PBS as S100 under Section 100 of the National Health Act 1953 and is approved by the Therapeutic Goods Administration (TGA).

Levoalphaacetylmethadol (LAAM)

LAAM is a synthetic opioid analgesic which acts similarly to methadone. It is long-acting and only needs to be taken three times per week. Overseas trials suggest that LAAM is as safe as methadone and has similar treatment outcomes and patient retention. This drug is not available for use in Australia.

Naltrexone (Revia®)

This is a competitive opioid antagonist, which completely blocks the effects of opioids for 24 to 72 hours. Maintenance therapy is suitable for highly motivated patients who wish to remain abstinent, are socially and psychologically stable and have good social support. Naltrexone is not listed on the PBS for opioid dependence but is approved by the TGA as an adjunctive therapy. Clinical trials are also underway using naltrexone for rapid detoxification.

WITHDRAWAL AND DETOXIFICATION

Detoxification is withdrawal from a drug in a supervised way in order to minimise withdrawal symptoms and risks related to withdrawal.

Details of withdrawal management are covered in the management and intervention sections of relevant chapters on specific drugs.

Effective withdrawal management may be performed in the home supported by the GP, other health workers and non-using supportive relatives or friends. This form of withdrawal management depends on:

- the drug of dependence
- the severity of the dependency
- the wishes of the patient

Home-based withdrawal management should be considered:

- when there is no evidence of severe withdrawal, e.g. tremor, hallucinations, disorientation*
- where there is no past history of delirium tremens or of fits*
- in the presence of supportive relatives who elect to stay with the patient during the period of detoxification
- when there is no evidence of a medical illness such as pneumonia or pancreatitis*
- when no previous history or evidence of suicide is contemplated
- where the patient does not have access to the drug from which they are being withdrawn

(in the case of alcohol)*

Withdrawal can be medicated (assisted by the use of controlled sedatives) or non-medicated. The latter is appropriate for patients who have no co-existing medical disorders and when only a mild withdrawal can be anticipated.

In cases of multiple drug use, patients may not wish to withdraw from all substances at the same time. Withdrawal management should be part of an ongoing treatment program linked to coping and relapse prevention strategies.

INTOXICATION AND OVERDOSE

Intoxication is defined as the intake of a quantity of a substance which exceeds the individual's tolerance.

Further reading:
Ellenhorn & Barceloux (1988)

Overdose is defined as the state that occurs when a person has ingested a quantity of a drug that exceeds tolerance and produces behavioural and physical abnormalities.

Details of intoxication and overdose management are covered under the management and intervention sections in each Chapter.

When presented with an intoxicated or overdose patient the priority is ABC First Aid procedures:

A — Airway

B — Breathing

C — Circulation/cardiac

In acute overdose it is recommended that patients are closely observed, monitored and referred to an acute hospital.

Do not assume that alcohol or drugs are the sole cause of the patient's coma. Other possible causes include:

- trauma
- epilepsy
- metabolic abnormalities – diabetes, hepatic failure, hypercalcaemia, renal failure
- cerebrovascular events – cerebral haemorrhage/thrombosis, abscess, tumour
- cardiovascular events – arrhythmias, myocardial infarction
- respiratory failure
- infection – meningitis, encephalitis

Once intoxication or overdose has been treated it is important to:

- ask about depression, suicidal ideation (may need a referral to a psychiatrist)
- explore withdrawal management and treatment options

COEXISTING MENTAL HEALTH PROBLEMS

In patients using alcohol and other drugs coexisting mental health problems, such as anxiety and depression, are not uncommon. It is important to distinguish symptoms which are:

- part of a primary psychiatric disorder
- secondary to problems such as marital conflict, homelessness or legal problems
- drug or alcohol induced

See Chapter 18
Coexisting Mental Illness

DRUG SEEKING

Clinical Features

Patients seeking prescribed drugs for non-medical use often approach emergency departments of major hospitals or general practitioners' surgeries at busy times or shortly before closing. Patients may choose a general practitioner who does not know them or who are known to prescribe drugs very readily.

Drug seeking patients are usually:

- polydrug using
- males
- aged in their twenties or thirties

The drugs sought are usually:

- opioid analgesics; or
- benzodiazepines

The presentations for analgesics usually involve painful conditions where there are few physical signs, such as headache, renal colic

or backache. The names of analgesics which have proved effective on previous occasions are often referred to with familiarity.

The most frequently requested opioid is pethidine by injection.

Commonly, patients will claim that analgesics other than the preferred type:

- have previously proved ineffective and/or
- resulted in severe side effects including an allergic reaction.

A careful history plus physical examination contributes substantially to the diagnosis and management plan. Suspicion of illicit drug use is supported by a history of common complications of drug use (such as hepatitis C, endocarditis or previous incarceration). Physical examination should include inspection for track marks. It is often helpful to have a patient discretely observed by an experienced nurse for signs of variability in the severity of signs of pain.

Management

As special tests usually cannot prove if the patient's symptoms result from organic disease, the final clinical decision depends on the doctor's judgment and experience. In most cases, decisions are relatively easy. When uncertain, the choice has to be made between possibly withholding analgesia from a patient in severe pain or possibly prescribing an opioid analgesic to a malingering patient. The former is a far more serious error.

Injections of ketorolac (Toradol®), a non-steroidal anti-inflammatory drug (NSAID), is a safe way of providing a potent analgesic without prescribing an opioid.

Buprenorphine is a potent analgesic which provides minimal euphoria but this can precipitate opioid withdrawal if the patient has withheld a history of recent opioid use.

Presentations for benzodiazepines often involve a history of anxiety or insomnia due to a recent bereavement. Short-acting benzodiazepines should only be prescribed in very special circumstances and then only in small quantities. If benzodiazepines have to be prescribed, it is better to select long-acting forms but in small quantities.

Doctors who consider that a patient is seeking drugs should gently advise the patient that they are concerned about this possibility and offer relevant assistance or referral.

GENERAL MANAGEMENT APPROACHES

Support and treatment for drug users should follow the general supportive and common-sense approaches described below.

Clinicians should:

- *not* judge the user and should not insist on abstinence
- seek to engage and retain the user in treatment for as long as possible, as retention is associated with better outcomes (Simpson et al., 1999)
- ensure understanding of the client/patient's treatment goals:
  - to make it through an acute crisis?
  - to reduce frequency and/or quantity of drug use?
  - to achieve long-term abstinence?
- tailor the treatment where possible to meet those goals, including referral when appropriate to:
  - treatment programs
  - individual counsellors
  - family counsellors
  - self-help groups such as NA

- remember the need for flexibility of service delivery; as goals and outcomes change throughout the course of treatment, the treatment program should be adjusted to reflect these changes
- provide as multifaceted and intensive a program as possible, as more intensive psychosocial treatment programs are associated with better outcomes (Crits-Cristoph, 1999).

Readiness to Change

In patients who do not wish to become abstinent despite significant impairment related to drug use, the clinician should attempt to:

- establish an empathetic, respectful relationship
- retain contact with the client
- maximise physical and mental health, as clients will find it difficult to achieve long-term abstinence if chronic medical problems have not been adequately treated
- enhance motivation toward abstinence by educating clients and their significant others about the usual course of drug dependence and the relationship between drug use and current and/or future problems
- emphasise the client's responsibility for their own actions
- help clients rebuild a life without drugs through:
  - vocational counselling
  - family counselling
  - helping them build a network of non-drug using peers
  - showing them how to use free time appropriately

RESOURCES

Further reading: A basic modern text on toxicology is Ellenhorn, M. & Barceloux, D.G. (1988), *Medical Toxicology: Diagnosis and Treatment of Human Poisonings*, Elsevier, New York.

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