

Management of Patients with Psychostimulant Use Problems:

Guidelines for General Practitioners

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Original Guidelines prepared by Linda Jenner, Amanda Baker, Ian Whyte and Vaughan Carr on behalf of the Guidelines Development Working Party (2004).

Updated 2007 by Lesley Dawes and Meriel Schultz, Australian General Practice Network on behalf of the Guidelines Review Working Group.

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Background

Purpose and scope of the guidelines

The purpose of this document is to provide guidelines for general practitioners throughout Australia to effectively and safely manage the care of individuals who are experiencing problems related to the use of psychostimulants, including psychostimulant and serotonin toxicity.

The aim of these guidelines is to assist general practitioners to:

1. identify patients who may be using psychostimulants;
2. engage psychostimulant users in treatment; and
3. identify and manage a range of adverse consequences of stimulant use including acute toxicity.

A brief decision tree is included to assist general practitioners to identify appropriate options for management.

There already exist a number of excellent publications for general practitioners that recommend management strategies appropriate for patients with alcohol and other drug use problems in general (see Appendix 1 for a list of these resources). Therefore these guidelines refer to issues related to psychostimulant users only. An explanation of the process used to develop the guidelines is at Appendix 2.

These guidelines should be used in conjunction with the publication *Models of Intervention and Care for Psychostimulant Users (Second Edition)*, National Drug Strategy Monograph Series Number 51. The monograph can be obtained by contacting National Mailing and Marketing on 1800 020 103, extension 8654, or is available to be downloaded from the department's website on http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/content/publications_monographs.

Target groups

These guidelines are for use by all general practitioners and apply to all psychostimulant-affected individuals including youth, Indigenous peoples, women and those with suspected co-existing mental health problems. General practitioners with little experience in the alcohol and other drugs field generally may choose to access materials related to assessment and interventions for drug and alcohol use problems in general (see Appendix 1).

Definition of psychostimulants

The range of substances collectively known as psychostimulants include:

1. MDMA (methylenedioxymethamphetamine) - 'ecstasy'
2. cocaine;
3. amphetamine sulphate or hydrochloride - 'speed';
4. methamphetamine;
 - a. crystal methamphetamine - 'ice', 'crystal meth';
 - b. methamphetamine tablets - 'pills';
 - c. methamphetamine 'base', which is usually a moist, oily substance.

Prescription stimulants such as Ritalin (methylphenidate), Duromine (phentermine), or Tenuate (diethylpropion), and dexamphetamine can also be misused by some people.

Patterns of psychostimulant use

Users of amphetamines can be categorised as experimental, 'recreational' (those who use irregularly in a social setting), 'binge' users or regular daily users. Some may use psychostimulants to improve work performance, and some may use stimulants in an effort to reduce weight. Intranasal 'snorting' or oral ingestion 'bombing' and smoking (crystal forms of methamphetamine) are common routes of administration by experimental and recreational users; while a significant proportion (particularly regular users) choose to inject. Injection is typically associated with higher levels of dependence (see Table 1 for criteria of dependence – Page 5) and other physical, psychological and social problems, as is smoking of some forms of psychostimulant drugs, such as crystalline methamphetamine, 'ice' or crack cocaine (1). It is common for psychostimulant users to also use other drugs, especially alcohol and cannabis, and often in risky ways.

Definition of acute psychostimulant toxicity

Psychostimulants are a group of drugs that stimulate the activity of the central nervous system, causing individuals to feel overly confident, euphoric, alert and energetic. However, at toxic levels, individuals may become extremely agitated, irrational, impulsive, paranoid and psychotic, which may lead the person to behave in an aggressive and/or violent manner. Sometimes psychostimulants are combined with alcohol, again increasing the risk of aggressive and violent behaviour.

The definition of 'acute psychostimulant toxicity' utilised by these guidelines describes an individual who has toxic levels of psychostimulants in their system. However, in this situation high level use of other drugs such as alcohol, cannabis, benzodiazepines or opioids may also be excessive. People who are heavy psychostimulant users often use these other drugs, in combination or as a means to manage some of the unpleasant effects of their use (e.g. 'coming down').

Consequences of psychostimulant toxicity include cardiovascular and cerebrovascular emergencies, acute behavioural disturbances, psychosis and serotonin toxicity of varying severity. It is important to recognise that toxicity may occur among both experimental and regular users of psychostimulants (2).

Introduction

Key points

- In Australia psychostimulants are the second most commonly used illegal drugs after cannabis.
- Many individuals will seek treatment from a general practitioner for a range of adverse consequences.
- The evidence relating to efficacy of amphetamine-specific treatment is sparse.
- Current good practice recommends accurate assessment, engagement, individual symptom management and regular review.
- Evidence for the use of pharmacotherapies for psychostimulant dependence is lacking.
- Psychostimulant toxicity has been recognised among both naive and regular users and represents a medical emergency when severe.

Almost two in every five Australians has used an illicit drug at some time in their lives and almost one in seven have used illicit drugs in the previous 12 months (3). Population studies estimate that more than half a million Australians had used an illicit stimulant during the year 2004 (3).

Among a sample of 200 regular amphetamine users in Sydney, many identified problems with dependent use as significant prompts for treatment seeking (4). Similarly, in another sample many users reported high levels of satisfaction with treatment received from a general practitioner (5). This is particularly important, as many psychostimulant users perceive alcohol and other drug treatment agencies to be largely unresponsive to their specific needs (6).

Adverse consequences of regular, heavy use of psychostimulants (7, 2), can include:

- poor nutrition;
- sleep disorders;
- skin problems (ulcers, infections, facial sores);
- engaging in high-risk behaviours (injecting, unsafe sexual activity, binge drinking, drug driving etc);
- blood borne viruses (BBVs) and sexually transmitted diseases (STDs);
- psychosis, paranoia, misperceptions;
- depression;
- anxiety;
- panic reactions;
- cardiovascular complications;
- cerebrovascular complications; and
- serotonin toxicity.

Further consequences include:

- family and relationship problems;
- financial difficulties;
- work and study effects; and
- potential accidents; violent incidents.

The role of the general practitioner

Psychostimulant users have traditionally not sought treatment (8), and some amphetamine users have opted for self-management or self-detoxification (9). However, a range of precipitants may prompt treatment seeking by psychostimulant users (psychotic symptoms, mood disturbances, aggressive outbursts, relationship problems etc) and research indicates that many who do seek treatment will be regular or dependent users who are experiencing a variety of adverse consequences (4, 5). The link with treatment services is, however, often tenuous.

Polydrug use is widespread among psychostimulant users, and comorbid mental health symptoms are commonly reported. Therefore, interventions will be determined by individual needs, or the needs of family members or carers who ask for assistance. Interventions range from withdrawal

management and post withdrawal support; rehabilitation programs; inpatient and outpatient care; and, for those who continue to use, strategies to reduce problems for individual consumers and the broader community.

Patients may disclose the use of psychostimulants and identify concerns with problematic use as a precipitant for treatment seeking. However, some psychostimulant users may not disclose use and instead might request prescription medications such as dexamphetamine or sedative-hypnotics. In this case, vigilant observation and astute questioning is required so an accurate initial assessment can be made.

The role of the general practitioner in assisting patients with a range of problems related to psychostimulant use includes:

1. effective engagement;
2. accurate assessment;
3. ongoing management and review; and
4. referral if necessary (particularly for patients experiencing severe psychosis)

It is important for general practitioners to recognise the relapsing nature of dependence, and ongoing management will often include supporting dependent patients through several attempts to change drug use behaviours. As with other chronic conditions (e.g. cigarette smoking) behaviour change often requires multiple attempts.

To ensure that treatment and support measures are effective and well coordinated, general practitioners require good knowledge of local health services, including the policies, protocols and procedures relevant to access and referral of people with psychostimulant problems.

Families can be a useful asset in assisting professionals to treat people who use psychostimulants and it is useful to assess whether it is appropriate to involve the family in the treatment process.

Guidelines

The guidelines are intended to be used by general practitioners in conjunction with the National Drug Strategy Monograph No 51 *Models of Intervention and Care for Psychostimulant Users (Second Edition)*. A thorough review of the literature is presented in the monograph. Hence, these guidelines provide a synopsis of the evidence only.

The current guidelines for the management of persons with problems related to the use of psychostimulants, including toxicity, address the following areas:

1. **Assessment:**

- a. spontaneous disclosure of psychostimulant use; and
- b. non-disclosure of psychostimulant use.

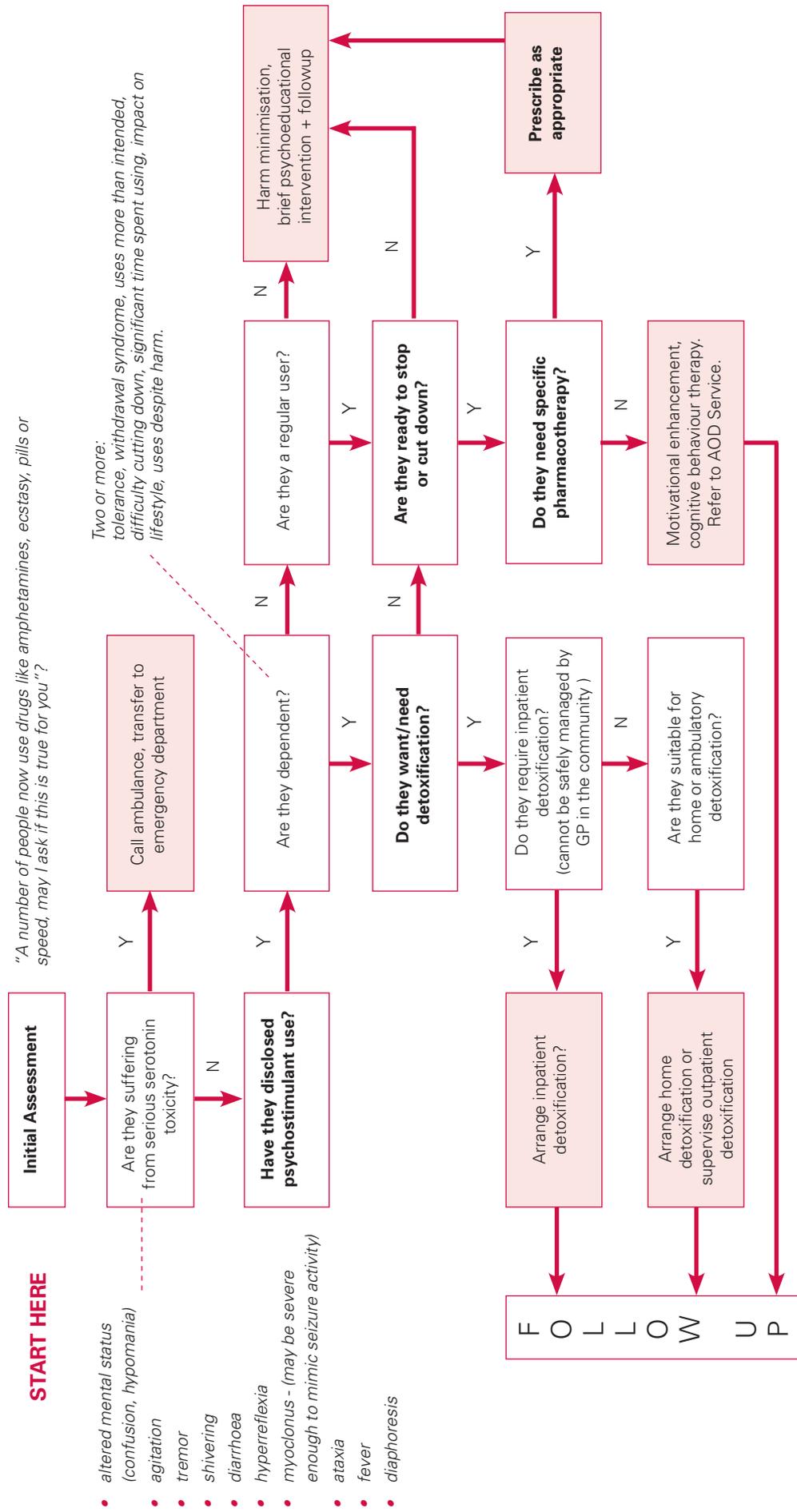
2. **Management:**

- a. general management issues;
- b. special issues in management;
 - amphetamine-related psychosis;
 - management of behavioural disturbance;
 - serotonin toxicity; and
 - assisting family members or carers.

Decision Tree

The following flow chart provides a decision tree for managing psychostimulant-related disorders in general practice. The flowchart is followed by detailed information related to the assessment and management of patients with psychostimulant use problems.

Decision tree for managing psychostimulant-related disorders in general practice



- altered mental status (confusion, hypomania)
- agitation
- tremor
- shivering
- diarrhoea
- hyperreflexia
- myoclonus - (may be severe enough to mimic seizure activity)
- ataxia
- fever
- diaphoresis

Assessment

When a patient discloses psychostimulant use

Some patients may spontaneously disclose the use of psychostimulants. In this case, a thorough history should be taken to inform appropriate management. The following points may serve as a guide (10), although if the patient is intoxicated or exhibiting signs of agitation or other behaviours that might impact on accurate assessment, an emphasis on engagement and reassuring the patient should take priority.

1. Psychostimulant use ('speed', 'go-ee', 'base', 'ice', 'meth', 'whizz' etc)
 - type of psychostimulant used (e.g. methamphetamine, amphetamines, cocaine, MDMA and prescription drugs);
 - amount of psychostimulant used ¹;
 - potency of psychostimulant used ("how long did it last"?, "was it strong"?)
 - route of administration (intranasal, intravenous, oral and inhalation);
 - frequency of use (e.g. regular daily use – number of times/day), binge pattern (e.g. use on several consecutive days followed by a 'crash'), recreational, other, etc;
 - duration of current use and age of first use; and
 - when last used (required to give an indication of how presentation relates to intoxication or withdrawal, and the pattern on use).
2. Other drug use:
 - use of other drug classes (particularly alcohol, benzodiazepines, cannabis, and opiates), including criteria above.
3. Dependence:
 - meets criteria for a diagnosis of dependence for psychostimulants and/or other drugs (see Table 1 below for criteria); and
 - severity of dependence on each drug used.
4. History of withdrawal:
 - experience of previous withdrawal symptoms, severity, course and treatment outcomes (withdrawal symptoms typically include irritability, insomnia, dysthymia, lethargy, and cravings to use, see NDS Monograph 51: Chapter 7: *Detoxification and Withdrawal Management*).

1 Amount can be measured in local dollar value; grams, 'points' of a gram, 'lines' or numbers of 'pills' taken.

5. Consequences of drug use:

- might include physical, psychological, financial, social and legal consequences and is a good starting point for enhancing motivation to change drug use behaviours. Many patients will report relationship problems (with friends and family) and this is a commonly cited motivator for seeking help.

6. Other conditions:

- presence of concomitant physical illness including blood borne viruses (HCV, HBV, HIV, skin infections, picking at skin/ulcers etc); and
- presence of concomitant psychiatric illness or psychiatric symptoms (psychosis, paranoia, depression, suicidal ideation etc).

7. Other factors :

- social/family/carer situation ("*do they support your goals*"?, "*do they use too*"?);
- stressors (e.g. legal, financial, social etc);
- employment status;
- accommodation;
- readiness to change drug use behaviour; and
- patient's goal for treatment.

Table 1: DSM-IV diagnostic criteria for substance dependence (11)

A 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. a need for markedly increased amounts of the substance to achieve detoxification or the desired effect; or
 - b. markedly diminished effect with continued use of the same amount of the substance;
2. withdrawal, as manifested by either of the following:
 - a. a characteristic withdrawal syndrome; or
 - b. the same or closely related substance is used to relieve or avoid withdrawal symptoms;
3. the substance is taken in larger amounts or for a longer period than intended;
4. there is a persistent desire or unsuccessful efforts to cut down or control substance use;
5. a great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects;
6. important social, occupational or recreational activities are reduced or given up because of substance use; and
7. substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.

Assessment is an ongoing process and regular evaluations of patient progress should occur as treatment progresses.

When a patient does not disclose psychostimulant use

If psychostimulant use is suspected, developing rapport, raising the issue in a **non-judgemental** way, and assuring the patient that you are willing to help may encourage the patient to disclose use. A general practitioner might raise the issue by asking a series of questions about health generally saying:

"Do you mind if I ask about your health generally? Do you sleep well, do you eat well, do you exercise, do you smoke, how much do you drink, do you use pills, do you ever inject, take any other drugs, eg. if you go out"

Or alternatively,

"A number of people use drugs like amphetamines, ecstasy, pills or speed. May I ask if this is true for you?"

This type of questioning implies acceptance of the patient without condoning the **use of psychostimulants**.

If the patient does not disclose psychostimulant use despite obvious signs and gentle questioning, this should not be considered a failed consultation as the development of a therapeutic alliance often takes time. In this case, conservative treatment of presenting symptoms should be implemented and a follow-up appointment offered.

Prescription of benzodiazepines or other sedative hypnotics at this stage is not recommended.

There are various reasons why a patient using psychostimulants might be reluctant to disclose drug use including fear of judgement or embarrassment. The following signs might indicate the patient has recently used psychostimulants or is moderately to severely intoxicated:

- restlessness, agitation (fidgety) and repetitive movements;
- rapid speech;
- motor agitation or pacing;
- hypertension;
- tachycardia;
- sweaty palms;
- dilated pupils that react sluggishly to light;
- clenched jaw/grinding teeth; and
- hypervigilance and paranoia.

The following signs might indicate long-standing or regular psychostimulant use:

- obvious signs of poor or under-nutrition;
- sores on face, arms or legs; and
- evidence of needle marks or thrombophlebitis.

Similarly, individuals may offer other reasons for treatment seeking such as:

- requests for sedative-hypnotics or prescription stimulants;
- complaints of insomnia or narcolepsy;
- reports of feeling anxious, depressed or irritable;
- complaints of weight gain;
- complaints of general lethargy; and
- complaints of worsening of psychotic symptoms.

General principles of management

As is recommended for the management of problems related to the use of alcohol and other drugs generally, management in general practice begins with the development of an appropriate treatment plan. This will be guided by the initial assessment and ongoing reviews. Family or carer involvement in the treatment process is also recommended and education and support should be offered as appropriate, particularly for parents of young people. However, it is important to reassure the patient that strict confidentiality will be maintained until consent is given, as many psychostimulant users are hypervigilant or paranoid and the creation of a trusting, therapeutic relationship is essential for ongoing care. It is critical that clinicians are able to create a relationship and environment where the individual feels safe.

Management strategies for various groups of users are briefly described below.

Experimental, recreational, occupational and non-injecting users who are not dependent on psychostimulants

Harm reduction strategies are appropriate for this group, and education about the range of possible adverse consequences of regular use such as mood disturbances, paranoid ideation, irritability and health consequences has been recommended (4). Offering the patient vaccination for hepatitis B is appropriate, as is discussion regarding the appropriateness of HBV, HCV and HIV serology and the implications of findings. Brief interventions to reduce the risk of transition to regular use or injecting are also appropriate (see Appendix 1 for a list of readings and resources for brief interventions).

Key feedback should include information on:

- Minimising route related risk;
- Increasing awareness of the risk of developing tolerance and dependence with increased frequency of use;
- Minimising high risk behaviours including injecting/sex/violence;
- Risks arising from poly drug use; and
- Attention to adequate hydration and cooling in club and dance party settings.

The essential elements of brief interventions are included in the FRAMES model (16):

Feedback: Involves feedback to clients of findings from your assessment.

Responsibility: **Patient is responsible for acting on the feedback given.**

Advice: Clear advice to change behaviour that comes from a GP may be effective.

Menu: Offer the patient a menu of options for change.

Empathy: Showing empathy has been shown to enhance motivation for change.

Self-efficacy: Reinforce the patient's optimism by identifying their skills and ability to change.

Regular users and dependent users

Regular psychostimulant users will probably present with a range of adverse psychological, physical and social problems. Individual management plans will be informed by the patient's treatment goals described below. Given the tenuous link that psychostimulant users have with services, development of a therapeutic relationship based on trust, empathy and a non-judgmental attitude, initially focused on responding to the patient's presenting problems (e.g. sleep, mood, nutrition, relationship problems) will facilitate opportunities to address cessation of use and reducing problems for those who continue to use.

1. Cessation of use

If the patient is dependent on psychostimulants, assess the need for supervised detoxification.

If detoxification is required:

Most patients can be safely managed in the community with regular monitoring by the general practitioner. There are a number of research initiatives in progress that seek to identify effective medications to assist withdrawal but at present there is no specific evidence to support any particular regime.

Patients who present with significant insomnia and/or anxiety may benefit from a short course of a benzodiazepine (no longer than two weeks) to assist in restoring sleep and reducing withdrawal-related agitation and anxiety (10). Patients should be educated about the possible lengthy withdrawal process as mood fluctuations, irritability and sleep disorders may persist for several months, and have been identified as precipitants to relapse by some users (9).

If dependence on other drug classes is apparent, particularly alcohol or benzodiazepines, and the patient intends to cease all drug use, a withdrawal syndrome can be reasonably expected to occur. It is important to manage the concomitant withdrawal according to existing protocols for that drug class, and assessment of the need for supervised detoxification should be undertaken. Referral for specialist advice may be appropriate.

Mood disorders (eg depression) are relatively common in people who are dependent. These disorders may pre date the drug use, be symptoms of withdrawal (and therefore of relatively short duration) or endure for long periods.

It is important that a diagnosis of depression is not made for the first time while the patient is either using or withdrawing. A diagnosis of depression must consider pre morbid functioning as well as the exacerbating effects of stimulant drugs on low mood. Generally a diagnosis of depression should be deferred until 2-4 weeks following cessation of use, during which time any primarily withdrawal-related mood symptoms will have started to abate.

Should mood disturbance (suggestive of primary depressive disorder) persist beyond a period of 2 to 4 weeks consideration should be given to the commencement of an antidepressant (since untreated depression in this group can act as a potent risk for relapse). Simultaneous use of stimulants and some antidepressants, particularly Selective Serotonin Reuptake Inhibitors (SSRIs), has been linked to serotonin toxicity in some patients (2) and will certainly be associated with a poorer therapeutic response.

In most cases therefore, general practitioners are encouraged, where safe to do so, to monitor patients mood for 2 to 4 weeks after cessation of psychostimulants prior to deciding to commence antidepressants, as a majority of patients' depressive symptoms will resolve with cessation of psychostimulants.

Low dose benzodiazepines may be prescribed to initiate restorative sleep. These should be prescribed for 4 to 7 days (never any longer than two weeks), and dispensing on a daily basis is recommended (7). For many patients withdrawal from psychostimulants will be associated with increased fatigue and sleep, so general practitioners should be aware that it may be a primarily anxiolytic effect that patients make seek from benzodiazepines.

If the patient does not require detoxification:

Psychological therapies such as cognitive behavioural therapy (CBT), motivational approaches and relapse prevention strategies may assist with continued cessation. General practitioners are advised to consider the options available under the Better Access Program which provides access to relevant Medicare item numbers and to psychological support (www.primarymentalhealth.com.au).

Cravings to use psychostimulants may be a considerable barrier to ongoing commitment to change. Patients may benefit from a discussion of strategies to manage cravings (e.g. distraction, delay using for short manageable intervals until craving passes, review personal reasons for change etc). Cravings decline in intensity each time they are not reinforced with drug use.

Strategies for dealing with craving fall into two main groups—ones to deal with the craving itself, such as diverting attention from it (e.g. distracting activity—as listed), and ones to help reduce the risk of use, regardless of whether craving is there. Planning ahead for situations where craving might be high can help stop use (i.e. identify risk situations and apply problem solving). Often these involve ways to make it harder to get the drug (leaving the venue, not having enough money), or ways to get some support from others (e.g. ask them to remind you why you want to stop using, getting them to help you say no, or to help you leave the situation). Referral to a specialist alcohol and other drug treatment service may be beneficial for patients who are willing to engage with public services.

A list of local alcohol and other drug agencies may be obtained by telephoning the Alcohol and Drug Information Service (ADIS) in each state, or by logging on to the Australian Drug Information Network (ADIN) on www.adin.com.au. A 24 hour specialist alcohol and other drug telephone advisory service for health professionals is available in each Australian state and territory (see Appendix 1).

GP Psych Support provides general practitioners with patient management advice from psychiatrists within 24 hours. (See Appendix 1).

2. Continued use

Some people may continue to use. There are still strategies that can reduce problems for themselves and for others (e.g. family; community). Harm reduction strategies such as using smaller amounts of the drug, using in the presence of other people, alternatives to injecting (e.g. 'snort', swallow, etc), using sterile injecting equipment when continuing to inject (or at least not sharing any potentially blood contaminated equipment), education regarding signs and symptoms of severe adverse consequences including toxicity, recommending 'rest' periods from the psychostimulant to enable the body to recover, encouraging adequate nutrition, and offering ongoing reviews of physical and mental health status to ensure engagement and early intervention if problems should occur.

Special issues in management

Amphetamine-related psychosis

Most individuals can, if they consume enough psychostimulants, develop an episode of psychosis characterised by hallucinations, paranoid delusions and bizarre and often hostile behaviours. People with mental illness are more sensitive to experiencing such effects, as are those people who have already experienced drug related psychotic episodes. Care needs to be taken on making a diagnosis of a more chronic psychotic illness in the face of acute intoxication and, as a rule, anti psychotics should be delayed until the acute presentation/intoxication has passed.

Acute psychostimulant-induced psychotic episodes may be indistinguishable from paranoid schizophrenia. In most cases of drug related psychoses there is a significant improvement in symptoms after 2 to 4 days with only a minority of patients experiencing persistent symptoms beyond one month.

In persistent cases there needs to be a coordinated approach to follow up assessment and consideration of monitored antipsychotic prescribing since, in some cases, a first episode schizophrenic illness may be precipitated in a vulnerable person.

There is substantial evidence that amphetamines can produce a distinctive psychotic episode with a good short-term prognosis in people with no pre-existing mental health problems (14). Similarly, the experimental administrations of amphetamines have been reported to lead to a worsening of positive symptoms in people with a pre-existing psychotic disorder such as schizophrenia (15). Many psychostimulant users report experiencing acute or subacute symptoms of psychosis at some time (15), which are often precursors to treatment seeking.

Signs of an impending psychotic episode can include:

- increasing agitation;
- insomnia not related to the use of psychostimulants;
- anxiety;
- fear;
- suspiciousness and hypervigilance;
- paranoia;
- over-valued ideas; and
- erratic behaviour.

In general, most of those presenting with behavioural disturbance related to psychostimulants require a psychiatric assessment. Initial management should be aimed at minimising risk to self and others whilst excluding any acute organic cause. Medication should be aimed at achieving rousable drowsiness. Sedation can most safely and effectively be achieved with benzodiazepines. Antipsychotics, if used acutely, should only be used on a short term p.r.n. basis and used only to obtain additional sedation. Typical antipsychotics such as haloperidol should be avoided, especially in neuroleptic naïve persons (17).

As a general rule, diagnosis of underlying psychotic disorders should be deferred until acute intoxication has passed. Serial assessments of patients during the period following cessation of use are helpful in determining the clinical progress of patients. Repeat antipsychotics must only be given after a full assessment has taken place, preferably with input from family and after the symptoms have been demonstrated to have persisted well beyond the period of intoxication. Patients should be warned that once a person has experienced an episode of substance induced psychosis they remain vulnerable to experiencing future psychotic episodes. Relapse prevention strategies are therefore particularly important for this group, and abstinence is the preferred goal for treatment to reduce the chance of psychotic relapse.

If symptoms persist or escalate in severity, a thorough psychiatric assessment should be sought as inpatient management may be required (10). The patient should be monitored over several weeks to ensure that the psychotic symptoms resolve and to detect significant symptoms of depression if they should occur.

Behavioural disturbances

Occasionally, a patient may present to a general practitioner with a request for sedative-hypnotics or prescription stimulants and become hostile or aggressive when the request is declined.

The primary aim of management is to reduce the risk of harm to the patient, general practitioner, staff and other patients. It is beneficial to establish protocols for the management of behavioural disturbances so that all staff, including reception staff and other general practitioners are familiar with how to proceed in the event of such an incident.

Respond to the patient in a calm and confident manner. Be aware that if the person is acutely intoxicated with psychostimulants and experiencing great fear or paranoid symptoms, unexpected stimuli such as loud noises or sudden movements may worsen the situation. So at all times use calming, de-escalating communication strategies. Individuals affected by psychostimulants are more likely to respond in a positive way to communication strategies that are not perceived to be aggressive, threatening or confrontational.

Recommended communication techniques for the GP and other general practice staff

- Listening to the patient.
- Using the patient's name to personalise the interaction.
- Calm, open-ended questioning to ascertain the cause of the behaviour.
- A consistently even tone of voice, even if the person's communication style becomes hostile or aggressive.
- Avoidance of the use of 'no' language, which may prompt an aggressive outburst. Statements like "*I'm sorry, practice policy doesn't allow me to prescribe certain medications but I can offer you other help, assessment, referral etc ...*" may encourage further communication and often has a calming effect on the patient.
- Allow the individual as much personal space as possible and do not allow the person to block your exit from the consultation room.
- Judgement should be exercised regarding amount of eye contact e.g. consider avoidance of too much eye contact as this can increase fear or promote aggressive outbursts in some hostile or paranoid individuals.

These techniques will assist general practitioners to determine the individual's level of responsiveness to de-escalation strategies and further assess the degree of risk to all involved. However, if the risk to personal safety is high and the patient is unable to be calmed, it may be necessary to call for police assistance.

Serotonin toxicity

There have been several reports of serotonin toxicity associated with the use of psychostimulants in the recent past, particularly MDMA (ecstasy). Serotonin toxicity may be a mild, self-limiting condition or be potentially fatal with symptoms such as muscle rigidity, coma, seizures, hypertension or hypotension. When the toxicity is severe, rhabdomyolysis with hyperkalaemia, acidosis and frank renal failure may result (2).

The presence of serotonin toxicity is determined by clinical assessment, and a set of criteria exists for this purpose (see points below). If the recent use of a serotonergic agent is suspected (peak risk time for cocaine is 20 to 40 minutes after administration, and peak risk time for an amphetamine is approximately two to three hours after administration) or use is confirmed and three of the following criteria are met (Sternbach 1991 cited in 2), a diagnosis of serotonin toxicity may be made (2):

- altered mental status (confusion, hypomania);
- agitation;

- tremor;
- shivering;
- diarrhoea;
- hyperreflexia;
- myoclonus (may be severe enough to mimic seizure activity);
- ataxia;
- fever; and/or
- diaphoresis.

General practice management of severe serotonin toxicity involves:

1. early identification of the syndrome, including educating patients about early warning signs (muscle rigidity, increasing body temperature, increasing agitation, severe headaches etc); and possibly
2. mechanical cooling (cold packs, fans and fluids) until the patient can be transported, ideally via ambulance to the emergency department.

Once in the emergency department, the patient is continuously monitored, IV fluids are given and medications appropriate to the presenting symptoms are administered. In rare cases mechanical ventilation may be required if respirations are compromised (2). The general practitioner may also consider the administration of oral benzodiazepines 5-10 mg as a starting dose if circumstances or lack of available resources delay transport to the emergency department. A thorough description of the management of toxicity can be found in *Models of Intervention and Care for Psychostimulant Users (Second Edition)*, National Drug Strategy Monograph Series No 51.

Assisting family members and carers

Family and carer disruption is frequently associated with the use of psychostimulants and other drugs. It is often difficult for carers to understand why their family member continues to use substances in the face of ongoing problems with their mental health, the legal system or finances.

It is essential for the families of psychostimulant users to obtain information that they can understand, as well as support and practical assistance to enhance their own wellbeing during the day to day care of their family member. Family Drug Support is a national organisation that can provide support 24 hours 7 days a week: National helpline 1300 368 186 and website www.fds.org.au.

GPs can help family members and carers by:

- a) simply discussing the concept of readiness to change to promote an understanding of the possibility of relapse and ambivalence to change substance use;
- b) describing the effects of psychostimulants, particularly symptoms of psychosis, effects on mood and anxiety and early warning signs;
- c) describing treatment options and range of outcomes to prevent false expectations of treatment interventions;
- d) advising the family of local support groups (see ADIN website);
- e) advising the family of local alcohol and drug counsellors;
- f) listening to them and helping them to clarify their issues and reactions and assuring them that feelings of both distress and helplessness are shared by other families and are normal in their situation;
- g) giving them as much information as possible without violating the patient's rights to confidentiality; and
- h) encouraging safety and wellbeing by the setting of appropriate limits on the other person's behaviour and knowing how to protect themselves including calling police

In a nutshell

1. In Australia psychostimulants are the second most commonly used illegal drugs after cannabis.
2. Individuals are likely to seek assistance from a general practitioner when adverse consequences of use are experienced. Individuals may not always identify as being psychostimulant users and may present for other reasons (e.g. requesting prescription of benzodiazepines for insomnia).
3. Many people who are dependent on psychostimulants have found that their relationships have been adversely affected. They may be agitated, suspicious, anxious and so on. A critical skill for general practitioners is the ability to form a therapeutic alliance with the patient, ensuring an environment that is coincidentally safe for patient and staff.
4. Management principles involve accurate assessment and treatment planning that considers pattern of use, severity of dependence and the patient's goal for treatment.
5. Detoxification from psychostimulants can often be undertaken in the community.
6. Medications, although not empirically proven to be of benefit, may be prescribed on an individual basis (ie. Short course of benzodiazepines during withdrawal, antidepressants for depression, and antipsychotics for psychosis), with special attention to the risk of drug interactions such as serotonin toxicity and the development of iatrogenic benzodiazepine dependence.
7. Symptoms of mild psychosis can often be managed by general practitioners and is best done in collaboration with the local mental health team; however patients should be thoroughly assessed by specialist mental health services if symptoms persist or worsen during treatment.
8. Severe serotonin toxicity should be managed in the emergency department. However, general practitioners are well placed to identify the syndrome should it occur, and educate patients about early warning signs (muscle rigidity, increasing body temperature, increasing agitation, severe headaches etc).
9. Calming communication to de-escalate potentially dangerous situations is recommended if a patient becomes hostile or violent in the general practice setting, although the police may need to be called to a high-risk situation.

10. Some patients may benefit from referral to specialist alcohol and drug services for ongoing relapse prevention and management interventions; and
11. Families and carers can benefit from receiving basic information about psychostimulants and support on an as needed basis.

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Appendices

Appendix 1: Other resources and useful internet links

- i. *Alcohol and Other Drugs: A Handbook for Health Professionals* (2004) Australian Government Department of Health and Ageing. <http://www.aodgp.gov.au/internet/aodgp/publishing.nsf/Content/handbook>
- ii. *Alcohol and Other Drugs: a website for General Practitioners and Health Professionals*. This website is a companion to *Alcohol and Other Drugs: A Handbook for Health Professional and the Resource Kit for GP Trainers on Illicit Drug Issues*. <http://www.aodgp.gov.au/>
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- iv. Lee, N., Johns, L., Jenkinson, R., Johnston, J., Connolly, K., Hall, K., and Cash, R. (2007). *Methamphetamine Dependence and Treatment*, Turning Point, Victoria.
- v. McIver, C., McGregor, C., Baigent, M., Spain, D., Newcombe, D. and Ali, R. (2006). *Guidelines for the medical management of patients with methamphetamine induced psychosis*. Drugs and Alcohol Services Council SA.
- vi. Drug and Alcohol Specialist Advisory Services: see box at end of this section for state phone numbers for 24 hour service to health professionals.
- vii. GP Psych Support. See box at end of this section for national contact details, www.psychsupport.com.au
- viii. Australian Drug Information Network (ADIN), www.adin.com.au
- ix. *Family Drug Support* Inc. is a national organisation that can provide support 24 hours 7 days a week: National Helpline 1300 368 186 and website www.fds.org.au .
- x. Centre for General Practice Integration Studies, University of New South Wales. <http://notes.med.unsw.edu.au/CPHCEweb.nsf/page/CGPJS>
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- xii. *Clinical Treatment Guidelines Series*, Turning Point Alcohol and Drug Centre, http://www.turningpoint.org.au/library/lib_ctgs.html
- xiii. *Treatment Approaches for Alcohol and Drug Dependence: An Introductory Guide*. <http://ndarc.med.unsw.edu.au/ndarcweb.nsf/page/resources>

- xiv. The 'Can Do' Initiative: managing mental health and substance use in general practice. Training programs and resources for general practitioners and allied health workers. <http://www.primarymentalhealth.com.au/site/index.cfm?display=15142>
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- xviii. *A user's guide to speed*. National Drug and Alcohol Research Centre (NDARC) <http://ndarc.med.unsw.edu.au/ndarcweb.nsf/page/Resources#speed>
- xix. *Clinical skills training series: effective approaches to alcohol and other drug problems, modules 1-5*. Newcastle: University of Newcastle; Training, Health and Educational Media, 1998. (National Teaching Grant held by Amanda Baker and National Centre for Education and Training on Addiction).
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GP Psych Support

To access GP Psych Support

Telephone: Call 1800 200 588. You will be asked a few brief questions concerning your enquiry and provided with a time when a psychiatrist will phone you back.

Fax: 1800 012 422. Using the faxback form available on the website, you are asked to provide details regarding the issue for discussion. A psychiatrist will fax or call you to discuss case details.

Online: www.psychsupport.com.au is a secure and password protected website. Log in at www.psychsupport.com to submit your question. The psychiatrist's response will be made available to you on the website.

Specialist Alcohol and Other Drug Advisory Services

Australian Capital Territory

24-hour telephone service for health professionals and community members:
Community Health Helpline - 02 6207 9977.

New South Wales

24-hour telephone service for health professionals:
NSW Drug and Alcohol Specialist Advisory Service (DASAS) - 1800 023 687 (Outside Sydney), 02 9361 8006 (Sydney).

Northern Territory

24-hour telephone service for health professionals:
Drug and Alcohol Clinical Advisory Service (DACAS) - 1800 111 092.

Queensland

24-hour telephone service for health professionals and community members:
Alcohol and Drug Information Service (ADIS) - 1800 177 833 (Outside Brisbane), 07 3236 2414 (Brisbane).

South Australia

24-hour telephone service for health professionals and community members:
Alcohol and Drug Information Service (ADIS) - 1300 131 340.

Tasmania

24-hour telephone service for health professionals:
Drug and Alcohol Clinical Advisory Service (DACAS) - 1800 630 093.

Victoria

24-hour telephone service for health professionals:
Drug and Alcohol Clinical Advisory Service (DACAS) - 1800 812 804 (Outside Melbourne), 03 9416 3611 (Melbourne).

Western Australia

24-hour telephone service for health professionals and community members:
Alcohol and Drug Information Service (ADIS) - 1800 198 024 (Outside Perth), 08 9442 5000 (Perth)

Appendix 2: Guidelines development process and stakeholder involvement

Development of the Guidelines (2004)

Following the development of Models of Intervention and Care for Psychostimulant Users (Second Edition), National Drug Strategy Monograph Series Number 51, guidelines for the management and treatment of individuals with psychostimulant-induced behavioural disorders and toxicity were developed for four front-line worker groups: emergency departments, ambulance services, general practitioners, and police services, as components of the Update of the National Drug Strategy Monograph No. 32: Models of Intervention and Care for Psychostimulant Users project, funded by the Australian Government Department of Health and Ageing.

Due to a lack of available literature or evidence for management of psychostimulant users specific to the general practice setting, the development of these guidelines was been informed by the opinions of an expert panel of clinical and academic staff. The expert panel also extrapolated from the general alcohol and other drug literature where appropriate. An Expert Reference Group who oversaw the update of the monograph publication determined the methodology that would be undertaken in developing the guidelines.

Guidelines Development Working Party

Dr Amanda Baker, Centre for Mental Health Studies, University of Newcastle (Chair)

Professor Ian Whyte, Senior Staff Specialist, Clinical Toxicology & Pharmacology, Newcastle Mater Hospital

Ms Linda Jenner, Centre for Mental Health Studies, University of Newcastle

Professor Vaughan Carr, Centre for Mental Health Studies, University of Newcastle

Dr David Spain, Emergency Department, Gold Coast Hospital

Mr Ron Henderson, Intensive Care Paramedic and Queensland State Drug Unit Coordinator, Queensland Ambulance Service

Professor John Saunders, University of Queensland

Dr Paul Mercer - General Practitioner, AOD specialist, RACGP Queensland representative

Dr Angela Dean, Department of Psychiatry, University of Queensland

Mr Michael Arnold, NSW Users and AIDS Association

Update of general practitioner guidelines 2007

The guidelines were updated in 2007 with the assistance of an expert panel of clinical and academic staff drawing on current knowledge and practice. While the guidelines remain based on *Monograph 51: Models of Intervention and Care for Psychostimulant Users*, changes and additions were made mainly to population based statistics; management of psychosis; involvement of families and carers; and references and resources.

Guidelines Review Working Group

Professor Steve Allsop, Director, National Drug Research Institute, Curtin University, Perth, WA.

Associate Professor Amanda Baker, Centre for Mental Health Studies, University of Newcastle, NSW.

Ms Melanie Cantwell, Director, Policy and Projects. Mental Health Council of Australia, Canberra, ACT.

Dr Adrian Dunlop, Area Director, Drug and Alcohol Clinical Services Hunter New England Area Health Service, NSW.

Dr Tony Gill, Clinical Director Addiction Medicine, Greater West Area Health Service, NSW.

Dr David Kavanagh, Professor, School of Medicine, University of Queensland.

Mr Michael Lodge, Manager New South Wales, Users and Aids Association, representing the Australian Illicit and Injecting Drug Users League.

Dr Chris McAuliffe, GP Advisor to the Australian General Practice Network

Dr Rod McQueen, GP and clinical consultant, Lyndon Withdrawal Centre, Orange, NSW.

Associate Professor Moira Sim, GP and Alcohol and other Drug Specialist, Coordinator of Postgraduate Medicine at Edith Cowan University, WA.

Mr Tony Trimmingham, CEO, Family Drug Support Inc. NSW.

Dr Adam Winstock, Clinical Director, Alcohol and other Drug Services, Sydney South Western Area Health Service and co-joint lecturer National Drug and Alcohol Research Centre, NSW.

