

What works in drug addiction?

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Abstract Treatment of illicit drug dependence typically involves a combination of pharmacotherapy and psychosocial interventions. Efficacy research supports methadone maintenance in opiate dependence. There is less evidence to support buprenorphine (an opiate receptor partial agonist), lofexidine (an α_2 -adrenoreceptor agonist) and naltrexone (an opiate receptor antagonist). Evidence for the effectiveness of detoxification, which one of the most widely used treatments, is poor. Of the psychosocial interventions, reasonable evidence exists for the effectiveness of motivational interviewing. Other psychosocial treatments have rarely been compared with no or minimal contact conditions in randomised trials, and their reported effectiveness is often weak. Residential treatments are not demonstrably more effective than community programmes.

Substance dependence, or 'addiction', is diagnosed taking several factors into consideration (Box 1). Substance misuse refers to the non-therapeutic use of drugs in a manner that is potentially harmful, but does not meet criteria for dependence. Guidelines for drug addiction treatment have been published by the Department of Health (1999).

Many trials report significant benefits of addiction treatments (National Consensus Development Panel, 1998). However, only 20% of subjects report abstinence from all illicit substances for at least 1 year, despite receiving treatment. Furthermore, drop-out rates of nearly 50% are common. It is notable that only half of patients with other chronic disorders (such as hypertension or diabetes) fully adhere to medication schedules, and high drop-out rates are common in many forms of psychotherapy.

Trials of treatment for drug addiction are liable to all the common methodological flaws seen in clinical trials in psychiatry, including failure to use intention-to-treat analysis, failure to randomise results, lack of socio-demographically matched control groups and confounding due to unplanned variations in contact with treatment services. A US government report recently concluded that 'results derived from self-selected patients who remain in treatment optimistically skew findings in favour of effectiveness' (National Research Council, 2002).

There is no consensus on outcome measures of trials of addiction treatments. Urine (and saliva) analysis can provide objective measures of drug use. However, many trials report subjective ratings, such as scores on the Addiction Severity Index (McLellan *et al*, 1980), a 45-minute semi-structured interview

Box 1 Diagnostic features for substance dependence

Three or more of the following should have been present in the previous year:

- a compulsion to take the substance
- escalation of amount used
- a withdrawal syndrome following reduction in use
- tolerance
- neglect of other activities in favour of substance use (salience)
- persistent use despite evidence of harm

based on psychosocial functioning and drug use. Meta-analysis results are often expressed as an effect size: the difference in mean scores divided by the pooled standard deviation. This statistical technique allows the direct comparison of the results of trials that have used different outcome measures. A trial comparing 50–100 users and controls is usually sufficient to identify a treatment with a modest effect size (conventionally 0.25–0.5) that is likely to be clinically significant.

Pharmacotherapy for drug dependence

There are no effective medications for treating stimulant dependence, despite trials of several agents (Bruce, 2000; de Lima *et al*, 2002). Hence, most

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Table 1 Drugs used in opioid dependence

Medication	Action	Typical daily dose
Methadone	Opioid agonist	20–100 mg orally
Buprenorphine	Partial agonist	8–24 mg sublingually
Naltrexone	Opioid agonist	50 mg orally
Lofexidine	α_2 -adrenergic agonist	0.8–2.4 mg orally

research involves treatment of opiate dependence. Commonly used agents are summarised in Table 1.

Methadone maintenance

Maintenance treatment involves the prolonged prescription of a drug with no intention to reduce the dose, whereas detoxification is any treatment intended to produce abstinence from drug use (including prescribed drugs).

Methadone is a long-acting opioid agonist that is used to prevent withdrawal symptoms in opioid addicts. Persistent use leads to cross-tolerance and reduces the reinforcement effects of illicit opiates. Ward *et al* (1999) have produced an excellent short review of methadone treatment.

An influential meeting of experts in the USA concluded that the safety and efficacy of methadone maintenance treatment 'has been unequivocally established' (National Consensus Development Panel, 1998). Many studies have shown the advantages of methadone maintenance in reducing drug use, criminality and blood-borne virus infection and improving general health and social status. The median death rate for addicted individuals maintained on methadone is 30% of that for those who are not in treatment. Urine analysis from one sample of 435 methadone maintenance clients showed that almost half were able to quit daily heroin after 12 months (Simpson *et al*, 1997). The average number of 'crime-days' fell from eleven per month to four. Two large cohort studies suggest that the odds of HIV infection were five times greater among those who were not in methadone maintenance treatment than among those who were (Ward *et al*, 1999).

A classic double-blind study involved 100 heroin addicts in Hong Kong who were randomised to methadone maintenance or methadone detoxification at 1 mg/day (Newman & Whitehill, 1979). Retention rates were 60% in the maintenance group and 5% in the detoxification group. Urine analysis at 2-year follow-up indicated that 70% of subjects in the maintenance group had abstained from illicit opiate use in the previous month.

Methadone doses above 60 mg per day are often required to prevent heroin use. However, it is important to note that initial methadone doses should be less than 40 mg per day to prevent accidental overdose in individuals who have not developed a high tolerance to opiates. One study concluded that patients who receive doses of less than 60 mg of methadone have nearly five times the risk of dropping out as those who receive doses of 80 mg or more (Capelhorn & Bell, 1991). A double-blind trial of 193 intravenous opiate addicts revealed that 53% of the urine samples after 30 weeks were heroin-positive in those randomised to 80–100 mg methadone, compared with 62% of those on 40–50 mg (Strain *et al*, 1999).

Contingency management in methadone maintenance and cocaine treatment

Contingency management techniques make clinic privileges or even continued prescribing available pending objective evidence of abstinence from illicit drugs.

McCarthy & Borders (1985) reported a controlled trial of 69 patients on methadone maintenance programmes who were randomised so that for half the patients, prescribing would be discontinued after 4 consecutive months with one or more opioid-positive urine result. Intention-to-treat analysis indicated that 48% of patients in the trial sample were drug-free at one year compared with 31% in the more liberal control group. Unfortunately, aversive control techniques (such as reduction of methadone) lead to some patients leaving treatment. Positive control techniques are reported by Stitzer *et al* (1992) in a study of 53 patients in methadone maintenance who were randomly assigned to contingent or non-contingent take-home privileges: up to three take-home doses per week were permitted following 2 consecutive weeks of drug-free urine samples. The contingent group produced more individuals with at least 4 consecutive weeks of abstinence (32% v. 8%) over the 6-month trial.

Comparable results are reported in a randomised controlled trial of opiate and cocaine addicts in which clean urine samples were rewarded with vouchers that could be exchanged for retail goods (Higgins *et al*, 1994; Preston *et al*, 2000).

Opioid detoxification

Medical detoxification relies on the use of agents, including methadone, buprenorphine, lofexidine or clonidine, in relatively short courses to suppress withdrawal symptoms. The daily dose of methadone can comfortably be reduced at rates of 1 mg per week

in the community or 5 mg per day as an in-patient. Detoxification is widely used, and it is perhaps surprising to find that it is one of the least effective treatments for drug addiction.

A major problem with opioid detoxification is the rate of relapse. A US follow-up study of 10 000 opiate addicts (the Drug Abuse Reporting Program; Simpson & Friend, 1988) found that patients entering out-patient detoxification had almost half the abstinence rate at discharge when compared with other treatment modalities (12% v. 18–21%). The results for Newman & Whitehill's (1979) randomised controlled trial of methadone maintenance indicated that detoxification had poor outcomes. The expert National Consensus Development Panel (1998) concluded that 'although the drug-free state represents an optimal treatment goal, research has demonstrated that the state cannot be achieved or sustained by the majority of persons dependent on opiates'.

Other agents used in the treatment of opioid dependence

Clonidine and lofexidine are α_2 -adrenoreceptor agonists that reduce somatic symptoms of opioid withdrawal. Opioid detoxification with these agents can be achieved in 5–7 days. However, neither agent can suppress symptoms such as craving, lethargy, insomnia, restlessness and muscle aches. Adverse effects include sedation and hypotension, although these are less common with lofexidine.

A systematic Cochrane review of 10 studies comparing α_2 -agonists and methadone detoxification over 10 days found no difference in efficacy, although more clients remained in contact with treatment services following methadone detoxification (Gowing *et al*, 2002). Kleber *et al* (1985) reported a trial of 49 methadone maintenance patients randomised to out-patient detoxification with clonidine or reducing doses of methadone over 30 days. Forty per cent completed the detoxification process, of whom one-third were abstinent at 6-month follow-up. An equivalent proportion had returned to methadone maintenance. There was no significant difference in outcome between the groups.

Buprenorphine is a partial opioid agonist and partial antagonist that is given sublingually. It might have a lower risk of overdose than methadone and produce less severe dependence, allowing a smoother withdrawal than methadone. A meta-analysis identified five randomised clinical trials, involving 540 patients over 16–26 weeks. This showed that buprenorphine was comparable with methadone in preventing illicit drug use, although it was more expensive (Barnett *et al*, 2001). Around

50% of urine tests were positive for illicit opiates. Doses of 8–12 mg per day of buprenorphine have been shown to be as effective as 60–90 mg of methadone (Schottenfeld *et al*, 1997). The risk that oral buprenorphine will be injected is greater than that for oral methadone and to deter this, a combination of buprenorphine with naloxone is being developed (the naloxone nullifies the buprenorphine only when injected).

Naltrexone is an opioid antagonist that produces no psychoactive effects or dependence. Naltrexone completely blocks the effects of opiates and acts as an 'insurance policy' against opiate use. It can precipitate acute withdrawal and should only be used following abstinence from all opioids (including methadone). Treatment can be given daily or three times per week. Unfortunately, naltrexone has not proven effective in treatment settings (Kirchmayer *et al*, 2002), although peculiarly, some investigators appear to have viewed it as a direct alternative to methadone rather than as an approach that can enable a completely opiate-free state. For example, in one trial only 15 of 300 patients chose naltrexone instead of detoxification or methadone maintenance, and of those 15, only three continued naltrexone for more than 2 months (Fram *et al*, 1989).

L-alpha-acetylmethadol (LAAM) is a long-acting opiate agonist like methadone. It is not available in the UK, following reports of cardiotoxicity.

Ultra-rapid opiate detoxification

Ultra-rapid opiate detoxification involves administration of opiate antagonists (naloxone and naltrexone) to opiate-addicted individuals under general anaesthesia. This leads to an acute withdrawal. No large-scale controlled trials of this procedure have been published (O'Connor & Kosten, 1998). Concerns about safety, expense and effectiveness also limit its usefulness. Ultra-rapid opiate detoxification was recently the subject of a General Medical Council investigation following the death of a patient during recovery, resulting in the anaesthetist involved being struck off (Bedenoch, 2002). It seems unlikely that there will be any enthusiasm for ultra-rapid opiate detoxification among clinicians in the foreseeable future, although less drastic measures involving sedation rather than anaesthesia are not so controversial.

Injectable opioid treatment

Heroin is available to addicts in the UK from licensed specialists. Parenteral methadone is also available, with licensing not required. Hartnoll *et al* (1980) reported a 12-month follow-up trial of intravenous heroin v. oral methadone on 96 heroin-addicted

individuals in London. Those on heroin maintenance were twice as likely to remain in treatment (74% v. 29%). However, the proportion remaining dependent on opiates (prescribed and illicit) at 12 months was higher in the heroin maintenance group (90% v. 70%). There were no differences between the groups for self-reported criminal activity, health or employment. This report led to greatly reduced enthusiasm for injectable opioid treatment. Another UK trial found no advantage between injectable methadone and oral methadone (Strang *et al*, 2000).

Injectable opioid treatment is claimed by some enthusiasts to engage users in treatment more effectively than oral alternatives. Opponents suggest that it perpetuates injecting behaviour and thereby postpones eventual abstinence from heroin and also, in effect, endorses injecting. The treatment is expensive and there is a risk of deep-vein thrombosis and infection. The prospect of being offered injectable opiates may also provide some users with a vested interest in poor compliance with methadone maintenance. Relatively few patients are ever likely to receive the treatment, so the overall effects on crime will be small. Needle exchange programmes probably reduce health risks more than the prescription of injectables. The available evidence does not support the widespread adoption of injectable opioid treatment.

Psychosocial treatment

Intensity of psychotherapy

Many studies have shown that the intensity and duration of involvement in drug misuse treatment programmes is one of the best predictors of outcome (National Consensus Development Panel, 1998). However, the 'more is better' idea is often based on uncontrolled follow-up studies, in which patient motivation and selection might be primarily responsible for the good outcome.

Kraft *et al* (1997) reported a trial of 100 opiate-addicted patients, randomised to three psychosocial treatments of 6 months duration: minimum-contact methadone maintenance; methadone maintenance plus standard drug counselling three times weekly; and an enhanced programme of psychosocial treatment with daily counselling, family therapy and social work activity to enhance job prospects, housing and address other social problems. However, many of the subjects who were randomised to the enhanced programme actually attended only once each week, despite the offer of more-frequent sessions. All patients received 60–90 mg methadone per day. Abstinence from opiates and cocaine use at 1 year were 29%, 47% and 49% of clients in the

minimum-contact, standard and enhanced groups, respectively. These results were less promising than a partially randomised earlier trial. Overall, the enhanced programme did not confer significant benefit over standard drug counselling, although it was better than minimum-contact methadone maintenance. A cost-effectiveness analysis confirmed this.

Narcotics Anonymous and its 12-step approach

Narcotics Anonymous provides support groups for problem drug users. These groups are widely available and are free to participants. Applying the disease model to substance misuse, they promote the 12-step approach. This involves recognition that addiction is a relapsing illness that requires complete abstinence (Box 2). Participants are

Box 2 The 12 steps of Narcotics Anonymous

- 1 We admitted that we were powerless over our addiction, that our lives had become unmanageable.
- 2 We came to believe that a Power greater than ourselves could restore us to sanity.
- 3 We made a decision to turn our will and our lives over to the care of God as we understood Him.
- 4 We made a searching and fearless moral inventory of ourselves.
- 5 We admitted to God, to ourselves, and to another human being the exact nature of our wrongs.
- 6 We were entirely ready to have God remove all these defects of character.
- 7 We humbly asked Him to remove our shortcomings.
- 8 We made a list of all persons we had harmed and became willing to make amends to them all.
- 9 We made direct amends to such people wherever possible, except when to do so would injure them or others.
- 10 We continued to take personal inventory and when we were wrong we promptly admitted it.
- 11 We sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out.
- 12 Having had a spiritual awakening as a result of these steps, we tried to carry this message to addicts and to practice these principles in all our affairs.

required to acknowledge their addiction and the harm they are causing themselves and others. No randomised controlled trials have attempted to determine the effectiveness of Narcotics Anonymous or of 12-step approaches in opiate addiction. However, a study of 487 cocaine users, all of whom received group drug counselling throughout the trial, involved randomisation to individual counselling (based on the 12-step approach), supportive-expressive psychotherapy or cognitive-behavioural therapy (CBT) with a 1-year follow-up (Crits-Christoph *et al*, 1999). One-third of the eligible cocaine users were recruited, of whom 28% completed the 6-month treatment programmes. Cocaine use was reduced from a mean of 10 days per month to only 3 days. However, 71% of the group receiving a combination of individual and group 12-step counselling were abstinent for at least 1 month, compared with 55–60% for combinations of group counselling with formal psychotherapy. The psychotherapy approaches were able to retain more clients in treatment (33% completed treatment *v.* 22% for drug counselling). Similarly, Wells *et al* (1994) report a controlled comparison of CBT-based relapse prevention *v.* 12-step approaches in out-patient treatment of 110 cocaine users. The two treatments were equally effective at 1 year, and the number of days of cocaine use halved. Overall, the evidence suggests that the 12-step approach is at least as effective as other structured psychotherapies.

Relapse prevention and cognitive-behavioural therapy

Relapse prevention techniques using CBT are based on the work of Marlatt & Gordon (1985). The techniques assume that substance misuse is a means of coping with difficult situations, dysphoric mood and peer pressure. Treatment aims to help patients recognise high-risk situations and either avoid or cope with them without drug use.

Irvin *et al* (1999) reported a meta-analysis of five randomised controlled trials of relapse prevention treatment for polydrug misuse. The overall effect was modest. For example, Carroll *et al* (1994) compared CBT-based treatment with routine clinical management over 1 year for cocaine addicts. CBT was only superior for those who were also depressed and for those with high levels of cocaine use. Wells *et al* (1994) found no difference between CBT-based relapse prevention and a 12-step approach in cocaine users (see above).

In one randomised controlled trial with 64 amphetamine-using patients, 2–4 CBT/motivational interviewing sessions were compared with provision of a self-help booklet. Clients typically attended half the sessions. The number of clients

who abstained from amphetamine use in the treatment group compared with the self-help group increased from 21% to 38% (Baker *et al*, 2001).

Overall, CBT approaches are better researched, but probably no more effective than the other psychological methods in addiction.

Psychodynamic psychotherapy

There is a widespread opinion that psychodynamic psychotherapy is of low acceptability to drug misusers, as illustrated by a trial of interpersonal psychodynamic psychotherapy with 72 opiate addicts in methadone maintenance (Rounsaville *et al*, 1983). Weekly individual interpersonal therapy was compared with monthly 'low-contact' control treatment. Both treatments continued for 6 months. Only 5% of eligible clients agreed to attend psychotherapy and only 38% of these completed the interpersonal therapy programme. There were no significant differences in outcome between the two groups, although both made significant gains. Woody *et al* (1995) reported a similar randomised trial of supportive-expressive psychotherapy, in which the overall effect size was small (0.26). Other investigators have failed to find advantages for psychodynamic psychotherapy in substance misuse (Crits-Christoph *et al*, 1999).

Motivational interviewing/motivational enhancement therapy

Motivational interviewing is a technique described by Miller & Rollnick (2002). It is based on theories of cognitive dissonance and attempts to promote a favourable attitude change. Briefly, instructing addicts of the problems of dependency and the advantages of abstinence tends to provoke contradictory arguments from the client. This might reinforce continued dependence. Motivational interviewing encourages clients to give their own reasons for attempting to change their drug use.

A systematic review identified five randomised trials of motivational interviewing in drug dependence, involving 800 patients (Dunn *et al*, 2001). Typical effect sizes were 0.5–0.6 (although confidence intervals were large). One randomised trial of 122 opiate addicts found that motivational interviewing compared with health education alone increased retention in methadone programmes at 6 months from 50% to 70% (Saunders *et al*, 1995). Booth *et al* (1998) reported a trial of 4000 intravenous drug users seeking HIV testing. Subjects were randomly assigned to either standard testing alone or testing plus three sessions of motivational counselling from a health educator. At 6-month

follow-up, the latter group showed half the rate of drug injection (20% v. 45%) and were four times more likely to be abstinent (confirmed by urine analysis). They also had significantly lower arrest rates (14% v. 24%).

Community reinforcement, couple and family therapies

Reinforcement treatments typically involve clients' partners or families rewarding them for abstinence using agreed strategies. Stanton & Shadish (1997) performed a meta-analysis of 15 randomised controlled trials, involving 1571 opiate addicts, that compared couple/family therapy with individual counselling, peer-group therapy and family psycho-education. Six of the trials involved adult clients. Family therapy methods had an effect size of 0.46 greater than non-family therapy at 1 year. The drop-out rate was also lower in the family therapy group (~45% compared with ~25%).

Community reinforcement using families and couples are feasible and show some effectiveness, although they are often overlooked. Not all clients have family members or partners who are willing to be involved in substance misuse treatment. However, where they can be recruited as co-therapists, family members can be encouraged to provide agreed rewards to clients for abstinence. The nature of the reward needs to be negotiated in advance with the client and family member. Family members also provide a degree of surveillance over the clients and can provide supervision, support, advice or comment if clients begin using drugs again, feel tempted or put themselves in risk situations.

Therapeutic communities and residential rehabilitation units

These units typically require prolonged residence (often 12–18 months). Clients are closely involved in running the programmes, including selecting and discharging residents. Abstinence is usually a prerequisite. Several large studies suggest that therapeutic communities are beneficial, although completion rates for prolonged residential programmes are often below 20%.

A trial of 585 male heroin addicts involved random assignment to methadone maintenance or therapeutic communities (Bale *et al*, 1980). The outcomes between the two groups were comparable. Roughly half of the subjects who completed the programmes reported heroin use during the 12th (and final) month of the study. Unfortunately, only 18% of the subjects randomised to the therapeutic communities actually began the 6-month residential programmes.

Overall, only 10% of subjects successfully engaged in either of the programmes to which they had been assigned.

The National Treatment Outcome Research study is a follow-up of 1075 clients (most of whom were addicted to heroin) attending UK drug treatment agencies (Gossop *et al*, 2003). At 5 years, 42% of those who were attending community methadone programmes at the start of the study were regularly using heroin, compared with 39% of those who were in residential programmes at intake (and were subsequently discharged). Although the study was not randomised, these results support North American research demonstrating that residential programmes are no more effective than community programmes, despite the greatly increased cost.

Other approaches

A government report recently concluded that 'because of lack of investment in data and research, the nation is in no better position to evaluate the effectiveness of enforcement than it was 20 years ago' (National Research Council, 2002).

Drug treatment and testing orders were introduced in the UK under the Crime and Disorder Act 1998. Orders last from 6 months to 3 years. Under the relevant legislation, courts can require an offender to undergo treatment for drug misuse, subject to the offender's consent to such an order being made. Offenders are required to undergo testing for use of illicit substances and to 'submit' to treatment. If treatment is not satisfactory or clients reoffend, the court may sentence them again. Turnbull *et al* (2000) report the results of the pilot programmes, involving 210 offenders. The percentage of opioid-positive urine tests (excluding methadone) fell from 42% to 13%. However, approximately half of the offenders were discharged from the orders for breach of terms. These results are disappointing, despite US reviews suggesting that coerced offenders do no worse than voluntary clients (Anglin & Hser, 1991).

Needle exchanges have been widely adopted, their main purpose being to prevent transmission of HIV and hepatitis. Most surveys have concluded that they are effective in reducing needle sharing and blood-borne viruses and they encourage drug users to seek help. Needle exchange programmes do not appear to have caused an increase in injecting (Royal College of Psychiatrists, 2000). An Australian study concluded that the cost-effectiveness of needle exchanges varied from Aus\$50 to Aus\$7000 per life-year saved. There are no randomised controlled trials of needle exchange schemes or drug treatment and testing orders.

Conclusions

What works in drug addiction? Methadone maintenance has been shown to be safe and very effective on a variety of measures, including preventing illicit drug use. Buprenorphine is probably equally effective, although it is more expensive in some countries. Reasonable evidence exists for the effectiveness of motivational interviewing. Few randomised controlled trials compare other psychosocial treatments with no or minimal contact conditions. However, where evidence does exist, the effect size is often modest. Evidence for the effectiveness of detoxification is poor, even though this is one of the most widely used treatments. Residential treatments are not demonstrably more effective than community programmes.

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Multiple choice questions

- 1 The following are diagnostic features for substance dependence:**
- a compulsion
 - b withdrawal syndrome
 - c salience
 - d satiety
 - e tolerance.
- 2 Methadone maintenance:**
- a is less effective than detoxification
 - b should always be discontinued following continued illicit drug use
 - c should not usually be started at doses above 40 mg
 - d has been shown to be effective in randomised controlled trials
 - e is optimally effective with daily doses of 30 mg or below.

3 Drugs commonly recommended to treat opiate addiction include:

- a naltrexone
- b chlorpromazine
- c diamorphine
- d lofexidine
- e chlordiazepoxide.

4 The 12-step approach to treat addiction:

- a has been shown to be less effective than CBT-based methods
- b has a strong spiritual element
- c is universally effective for cocaine addicts
- d can be combined with motivational enhancement
- e remains the only effective relapse prevention strategy.

5 Most research has shown the following addiction treatments to be effective:

- a methadone maintenance
- b family therapy
- c needle exchange programmes
- d therapeutic communities
- e motivational interviewing.

MCQ answers

1	2	3	4	5
a T	a F	a T	a F	a T
b T	b F	b F	b T	b F
c T	c T	c F	c F	c T
d F	d T	d T	d T	d T
e T	e F	e F	e F	e T

INVITED COMMENTARY ON What works in drug addiction?

Few psychiatric specialities attract so much attention from other authorities and the general public as drug misuse. It is one of the major social problems of our time, and causes great difficulties for those who have become addicted, those around them and the community at large – not least through the effects of drug-related crime. Whether treatment is effective is not a matter simply of academic interest, but one that must be critically and correctly analysed so that

the balance that society has to strike between enforcement, preventive measures and treatment can be fairly judged. There can be a tendency for clinicians to overstate the effectiveness of treatment, perhaps partly because of a humane concern that incarceration, for instance, might make matters worse for their patients. However, this temptation must surely be resisted, as the realities of ongoing drug use, even in the face of advice, are often all too