

Ice: cool drug or real problem?

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Crystalline methamphetamine usage can wreak havoc in emergency departments

“Ice”, or crystalline methamphetamine, is a relatively new drug in Australia. It may be injected intravenously or swallowed, but is increasingly consumed by smoking. With about 1.8 million Australians (9%) reporting ever using methamphetamine and about half a million Australians aged 14 years and older (3.2%) reporting current use of the drug,¹ Australia is among the top dozen countries in the world in terms of prevalence of methamphetamine use.² However, its use varies considerably across the country, being higher in some states — such as Queensland (especially the Gold Coast region), South Australia and Western Australia³ — than others.

Reported methamphetamine use increased in surveys of the general population in Australia in the 1990s, but has since declined slightly.⁴ However, in recent years, indicators of harm (such as psychosis, emergency department presentations, and methamphetamine-related crime) have increased considerably. There was a 59% increase in amphetamine-related psychosis nationally between 1999–00 and 2003–04.⁵ In New South Wales, methamphetamine-related arrests rose from 18 per 100 000 population in 1995 to 46 per 100 000 population in 2005 (an increase of 253%).⁴

Why is the consumption of methamphetamine apparently relatively stable, while harms seem to be increasing markedly? Possible explanations for this anomaly include the problems of conducting and interpreting surveys of illicit drug consumption, the increasing purity of street methamphetamine, and the increasing availability and use of more readily absorbed forms of methamphetamine, including ice, which have a far greater psychoactive effect on the brain.

Methamphetamine has diverse health and social impacts. These include effects on hospitals, crime, personal relationships, employment and private debt. The nature and extent of these adverse effects have not yet been fully determined.

The report by Gray et al⁶ in this issue (*page 336*) represents one of the first attempts in Australia to estimate the impact of amphetamine use on a hospital. The authors found that amphetamine-related presentations account for over 1% of all admissions. They involve high-acuity patients who often present with aggressive behaviour, require prolonged emergency department admission and consume considerable resources. They concluded that increasing amphetamine use has had a substantial impact on the hospital emergency department studied.

Amphetamine-related presentations are a great burden on the health care system. It can take days before amphetamine-related psychosis can be distinguished from other serious mental health conditions, such as schizophrenia. Knowledge of the full nature and extent of medium- to long-term physical and mental health impairment from street amphetamine use is still evolving.

Although we should be wary of predictions that illicit drug problems are destined to deteriorate inexorably and indefinitely, it is likely that amphetamine-related problems will continue to

worsen in Australia for some time. In part, the increase in amphetamine production and use may reflect a shift from plant-based drugs (such as heroin or cocaine) to chemical-based drugs, which allow producers to evade law enforcement detection using aerial and satellite surveillance and to avoid the vagaries of the weather. The value of the global market in all illicit drugs for the year 2003 was estimated at US\$322 billion at the retail level,⁷ with the lucrative profits of drug trafficking estimated to account for 26%–58% of turnover.⁸

Existing alcohol and drug treatment services attract and retain few methamphetamine users, but services that specialise in patients with stimulant problems seem more successful in attracting a higher proportion.

The processes of amphetamine withdrawal and detoxification are still poorly understood. Psychosocial interventions (such as cognitive behavioural therapy, contingency management and motivational interviewing) may be sufficient for the many patients with milder problems. But these interventions are unlikely to be sufficient for those who consume substantial quantities of methamphetamine and have severe problems. While many pharmacotherapeutic agents have been tried without success, amphetamine substitution treatment⁹ appears to be an effective and safe treatment for carefully selected, treatment-refractory patients with severe problems.

Drug law enforcement is often touted as a panacea for the problem of illicit drug use, but, as a recent review noted,

There is strikingly little evidence that tougher law enforcement can materially reduce drug use. By contrast, drug treatment services remain in short supply, even though research indicates that treatment expenditures easily pay for themselves in terms of reduced crime and improved productivity.¹⁰

Accordingly, authorities would be wise to invest more in health and social interventions.

New drugs appear frequently in the constantly changing illicit drug industry and are often hailed as “the most dangerous drug yet”. In the politicised and highly charged environment surrounding illicit drugs, it is difficult, but all the more important, to maintain a balanced and evidence-based approach to policy and practice.

For many decades, tackling the illicit drug problem around the world has been considered primarily a matter for the criminal justice system. Funding has flowed accordingly, with health and social interventions usually treated as the poor cousins of law enforcement. Yet, in most countries, illicit drug use and consequent problems have continued to increase. The evidence for effectiveness and cost-effectiveness of health interventions for illicit drug use is far more impressive than the evidence for drug law enforcement. It is time that Australia regarded illicit drugs in general, and methamphetamine in particular, as primarily a matter for health and social interventions, although drug law enforcement should continue to play an important role.

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