

# Addiction and addiction medicine: exploring opportunities for the general practitioner

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Despite a growing evidence base on prevention, diagnosis and management of alcohol and drug problems, there is still prejudice and controversy among clinicians, policymakers, politicians and the public on how best to deal with substance misuse.<sup>1</sup>

The strengths of general practitioners — knowledge of patients and their families, continuity of care, good communication skills, empathy, listening, quiet determination, setting boundaries, knowledge of the community and relationship building — are all needed for treating patients with addictions.<sup>2</sup> These principles can enable addiction to be treated as any other chronic disease such as diabetes, with early implementation of known cost-effective treatments and patient follow-up by a primary care team. As with other chronic diseases, the aim is careful long-term management and support, not cure.

This article describes the challenges posed by substance misuse, summarises recent advances in addiction medicine, and advocates a stronger role for GPs in this key area.

## Substance misuse: the scope of the problem

Substance misuse and addiction are not new problems — people have been using psychoactive substances throughout history. Although alcohol and tobacco have been major drugs of addiction for centuries (and still constitute the major cause of addiction-related morbidity and mortality), illicit drug use has increased dramatically over the past few decades. It is estimated that, since the early 1960s, there has been a 7% annual increase in the number of heroin-dependent injecting drug users in Australia.<sup>3</sup> While heroin is less of a problem in New Zealand, “Kiwi ingenuity” has produced “home-baked” morphine and long-acting morphine preparations partially acetylated to heroin. Polydrug use is common, and many drug users seek a wide range of prescription medications, including analgesics (eg, opioids, codeine, dextropropoxyphene, tramadol), anxiolytics, anorexiant (eg, phentermine, diethylpropion), anticholinergics, ephedrine and pseudoephedrine, cyclizine, methylphenidate and anabolic steroids.<sup>4</sup> There is anecdotal evidence of a recent increase in prescription drug dependence,<sup>5</sup> which may be related to the quadrupling of prescriptions for pain management and palliative care in NZ between 1998 and 2001.<sup>6</sup> Indeed, the International Narcotic Control Board, an independent and quasi-judicial control organisation monitoring the implementation of the United Nations’ drug control conventions, has warned: “In some regions, people abuse licitly produced prescription medicines in quantities similar to or greater than the quantities of illicitly manufactured heroin, cocaine, amphetamine and opioids that are abused”.<sup>7</sup>

In Australia in 2003, an estimated 8% of the disease burden was attributable to tobacco, 2% to alcohol and 2% to illicit drugs.<sup>8</sup> Alcohol dependence and harmful use are the leading cause of disease burden for Australians aged 15–24 years, accounting for over 9% of their total disease burden.<sup>9</sup> Heroin dependence and harmful use account for 6% of the total disease burden for this age group.<sup>9</sup>

In NZ in 2006, the estimated social costs (ill health, premature death, reduced productivity, crime and accidents) of tobacco, alcohol and illicit drug use to society were NZ\$2.81–3.71 billion.<sup>10</sup> In Australia, the social costs of drug misuse have risen to \$56.1 billion

## ABSTRACT

- Addiction medicine deals with problems arising from the use of psychoactive substances, and encompasses the disciplines of general practice and primary care, psychiatry, psychology, internal medicine, public health, pharmacology and sociology.
- Addiction is a chronic, relapsing illness that is difficult to cure.
- There are now effective, evidence-based interventions for the prevention and treatment of substance misuse disorders.
- Harm minimisation and treatment are more cost-effective than policing and supply-reduction methods of responding to substance misuse.

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in the 2004–05 financial year.<sup>11</sup> Tobacco accounted for 56.2% of these costs, followed by alcohol (27.3%), illicit drugs (14.6%), and alcohol and illicit drugs consumed together (1.9%).<sup>11</sup> This represents an increase of over \$20 billion since 1998–99.<sup>12</sup>

The popularity of recreational drugs other than alcohol and tobacco is shown in Box 1. A small proportion of people are on a methadone or buprenorphine maintenance program (0.19% of the Australian population in 2006;<sup>8</sup> 0.1% of the NZ population in 2008 [Jenny Wolf, Addictions Project Manager, New Zealand Ministry of Health, personal communication]).

The pattern of illicit drug use is changing. In Australia, between 2004 and 2007, there was a significant fall in the population aged 14 years or older who had used an illicit drug in the past 12 months, from 15.3% to 13.4%. Recent cannabis use dropped significantly between 2004 and 2007, from 11.3% to 9.1%. Recent use also declined for methamphetamine, but increased for cocaine.<sup>13</sup> In NZ, recent cannabis use dropped from 20.4% to 17.9% between 2003 and 2006, and there was an increase in the level of amphetamine and cocaine use over this period.<sup>14</sup> Alcohol and cannabis use is higher in Indigenous Australians<sup>8</sup> and Māori<sup>10</sup> than in the respective non-indigenous populations.

## Addiction medicine: debunking myths

Addiction medicine deals with problems arising from the use of psychoactive substances. *Addiction* was replaced with *dependence* as a diagnostic term in 1980 in the third edition of the *Diagnostic and statistical manual of mental disorders* (DSM-III) and the International classification of diseases, ninth revision (ICD-9). However, realisation that there is a continuum of substance use, ranging from social or recreational use to misuse to dependence, has resulted in a resurgence of the term *addiction* — indeed, it may replace *dependence* in the forthcoming DSM-V.<sup>15</sup> Substances vary in their addictive properties, and individuals vary in their susceptibility to their effects, resulting in a wide range of definitions. The DSM-IV,<sup>16</sup> ICD-10<sup>17</sup> and a recent article by Morse and Flavin<sup>18</sup> contain examples of these.

Most drug users eventually overcome their dependence and, even among those with problems severe enough to enter treatment

**1 Lifetime use of recreational drugs other than alcohol and tobacco in Australia and New Zealand**

	Australia, 2007 <sup>13</sup>	New Zealand, 2006 <sup>14</sup>
Cannabis	33.5%	44.1%
Benzylpiperazine (BZP)	—	21.4%
Ecstasy	8.9%	8.0%
Hallucinogens	6.7%	16.4%
Methamphetamines	6.3%	11.1%
Cocaine	5.9%	4.5%

**2 Rates of uptake of popular drugs, and subsequent dependence, from a United States survey<sup>19</sup>**

	Lifetime use	Lifetime dependence	Capture rate*
Tobacco	75.6%	24.1%	31.9%
Heroin	1.5%	0.4%	23.9%
Cocaine	16.2%	2.7%	16.7%
Alcohol	91.5%	14.1%	15.4%
Cannabis	48.3%	4.2%	9.1%

\* The proportion of those who have ever used who have gone on to become dependent. ◆

services, around two-thirds will achieve stable and enduring abstinence after approximately 20 years.<sup>19</sup> Box 2 shows the rates of uptake of and subsequent lifetime dependence for five substances, based on a population survey of over 8000 adults in the United States<sup>20</sup> — debunking the “one hit and you’re hooked” myth. The survey’s results also confirm tobacco is more addictive than heroin. More recently, household surveys from the US<sup>21</sup> and Australia<sup>22</sup> have confirmed these findings, suggesting most drug users will “mature out” of their drug use. These results support the notion of an “addiction career” (the period in which substances cause problems for a user or their associates).<sup>19</sup>

We now know addiction is a chronic, relapsing illness that is difficult to cure. However, there is now strong evidence of effective interventions for the prevention and treatment of substance misuse disorders (Box 3).

**Policy responses: a lack of logic?**

Policy responses to illicit drug use and related problems may be characterised in three ways:

- measures to reduce availability (supply reduction);
- strategies to reduce demand (demand reduction); and
- interventions designed to directly reduce illicit drug-related harm without necessarily reducing availability or demand (harm reduction).<sup>1</sup>

Despite clear evidence of the cost-effectiveness of pharmacological treatments and harm-reduction interventions over law-enforcement interventions (supply reduction), the latter continue to attract most government funding.<sup>29,30</sup> The dissonance and lack of logic in this key area of government policy in an era of evidence-based policy and medicine has been highlighted by the Royal Australasian College of Physicians (RACP):

The fundamental flaw in policy on illicit drugs has been the failure to base policy on evidence ... Our approach should be

similar to our response to other health issues (such as cancer, hypertension and diabetes) where progress in health outcomes depends on adequately funded, rigorous research based on proper scientific progress.<sup>1</sup>

**In general practice: barriers and opportunities**

GPs and other primary care professionals such as practice nurses and mental health workers, operating in multidisciplinary care teams, have a key role to play in prevention, early detection and management of substance misuse and addiction. Over 80% of patients visit a GP at least once a year, GPs are seen as credible and trusted educators and patients’ attitudes towards lifestyle enquiry and interventions by GPs are positive. Moreover, people with addictions, particularly drug users, prefer to see their GPs rather than attend outpatient drug dependency services.<sup>31</sup>

However, there are considerable barriers preventing GPs from becoming more involved in addiction medicine. These include:

- a perception that GPs do not have a mandate to enquire about their patients’ drug and alcohol use;
- lack of adequate training as undergraduates and postgraduates;
- scepticism and pessimism about treatment effectiveness;
- perceived patient resistance;
- discomfort discussing substance misuse;
- time constraints; and
- a perception that drug users are chaotic and non-compliant.<sup>32-34</sup>

A survey of a nationally representative sample of 648 primary care physicians and a patient sample of 510 adults in the US found that 94% of primary care physicians failed to include substance misuse among the five diagnoses they offered when presented with early symptoms of alcohol misuse in an adult patient.<sup>32</sup>

Three factors have been shown to influence doctors’ preparedness to work with alcohol- or drug-affected patients:

- Role legitimacy (belief that substance misuse issues are a legitimate health area for the doctor to examine).
- Role adequacy (belief that they have sufficient knowledge, skills and training).
- Role support (belief that appropriate advice and assistance is available when needed).<sup>5</sup>

Role legitimacy is now widely accepted by most GPs, but further training and support are required to enhance role adequacy and support. Several promising developments in Australia, NZ and the United Kingdom indicate that progress is being made. The RACP established an Australasian Chapter of Addiction Medicine in 2001. There are now over 200 Fellows in this Chapter, 15% of whom have qualifications in general practice (Bick Fulton, Secretary, RACP, personal communication). Through its state-based faculties, the Royal Australian College of General Practitioners provides support and training for members who care for patients with drug and alcohol problems. For example, the Victoria Faculty has a Drug and Alcohol Committee that organises an annual 2-day workshop to recruit and train interested GPs (Malcolm Dobbin, Senior Medical Adviser, Drugs Policy and Services Branch, Victorian Government Department of Human Services, personal communication). In the UK, the Royal College of General Practitioners has been commissioned by the Department of Health to produce a General Practitioner with Special Interest (GPwSI) framework for drug misuse services to improve access to treatment for drug users and support the embedding of effective services at primary care level.<sup>35</sup>

Over the past 20–30 years, high levels of alcohol consumption, increasing illicit drug use and a perceived increase in prescription

**3 Effective evidence-based interventions for the prevention and treatment of substance misuse disorders\***

- For men drinking at hazardous or harmful levels, brief interventions in primary care populations reduce alcohol consumption by 57 g/week (range, 25–89 g/week).<sup>23</sup>
- A range of psychological interventions (such as condensed cognitive behaviour therapy, motivational interviewing, motivational enhancement therapy, and social behaviour and network therapy) are clinically effective in alcohol dependence, with none being superior overall.<sup>24</sup>
- Acamprosate and naltrexone reduce alcohol intake, and increase the likelihood and prolong the duration of abstinence.<sup>25</sup>
- Methadone and buprenorphine maintenance programs reduce opioid use in dependent people and keep them in treatment programs.<sup>26,27</sup>

\* This evidence meets the level 1 criteria of the National Health and Medical Research Council's Standing Committee on Quality of Care and Health Outcomes<sup>28</sup> (ie, evidence obtained from a systematic review of all relevant randomised controlled trials). ◆

drug dependence have created a new frontier for clinical medicine. More clients are seeking treatment, but there are insufficient specialists and hospital-based facilities available. With appropriate training and support, GPs are well placed to respond to this challenge. They can identify substance misuse problems early, prevent addiction, facilitate access to treatment, provide ongoing, holistic and non-stigmatising services, and support patients and their families — all core features of general practice.

**Competing interests**

None identified.

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